

09/976,929

=> d his

(FILE 'HOME' ENTERED AT 11:54:31 ON 07 APR 2004)

FILE 'REGISTRY' ENTERED AT 11:54:39 ON 07 APR 2004

L1           STRUCTURE UPLOADED

L2           QUE L1

L3           31 S L2

FILE 'CAPLUS' ENTERED AT 11:56:30 ON 07 APR 2004

          E MELIKIAN?/AU

          E MELIKIAN-BADALIAN/AU

          E MELIKIAN-BADALIAN A?/AU

L4           15 S MELIKIAN-BADALIAN A?/AU

L5           1 S INDANE/TI AND L4

          SEL RN

FILE 'REGISTRY' ENTERED AT 11:58:20 ON 07 APR 2004

L6           142 S E1-142

L7           115 S L6 AND NRS>1

FILE 'CAPLUS' ENTERED AT 11:59:36 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:02:48 ON 07 APR 2004

L8           50 S L7 AND NRS=2

L9           14 S L8 AND PIPERAZIN?

L10          101 S L7 NOT L9

FILE 'CAPLUS' ENTERED AT 12:03:59 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:04:09 ON 07 APR 2004

L11          90 S L10 AND INDEN?

L12          11 S L10 NOT L11

FILE 'CAPLUS' ENTERED AT 12:05:15 ON 07 APR 2004

L13          2 S L11

          S PIPERAZINE/CN

FILE 'REGISTRY' ENTERED AT 12:06:51 ON 07 APR 2004

L14          1 S PIPERAZINE/CN

FILE 'CAPLUS' ENTERED AT 12:06:51 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:06:57 ON 07 APR 2004

L15          1 S PIPERAZINE/CN

L16          506380 S 46.383/RID

L17          30 S L2   SUB=L16 SAM

L18          615 S L2   SUB=L16 FUL

FILE 'CAPLUS' ENTERED AT 12:10:58 ON 07 APR 2004

L19          70 S L18

L20          ANALYZE L19 1- RN HIT :       540 TERMS

FILE 'REGISTRY' ENTERED AT 12:11:16 ON 07 APR 2004

L21          1 S 80273-79-6/RN

L22          614 S L18 NOT L21

FILE 'CAPLUS' ENTERED AT 12:11:46 ON 07 APR 2004

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L23            53 S L22

FILE 'REGISTRY' ENTERED AT 12:12:19 ON 07 APR 2004

L24            100 S 80273?/RN

L25            100 S 80274?/RN

L26            100 S 96478?/RN

L27            100 S 104113?/RN

L28            100 S 104153?/RN

L29            100 S 85663?/RN

L30            99 S L22 AND L24

L31            59 S L22 AND L25

L32            1 S L22 AND L26

L33            4 S L22 AND L27

L34            1 S L22 AND L28

L35            53 S L22 AND L29

L36            STRUCTURE UPLOADED

L37            QUE L36

L38            47 S L37 SUB=L18 FUL

FILE 'CAPLUS' ENTERED AT 12:15:44 ON 07 APR 2004

L39            5 S L38

FILE 'REGISTRY' ENTERED AT 12:16:09 ON 07 APR 2004

L40            4 S L37

L41            910 S L37 SSS FUL

FILE 'CAPLUS' ENTERED AT 12:16:43 ON 07 APR 2004

L42            496 S L41

FILE 'REGISTRY' ENTERED AT 12:17:16 ON 07 APR 2004

FILE 'CAPLUS' ENTERED AT 12:17:45 ON 07 APR 2004

L43            ANALYZE L42 1- RN HIT :        889 TERMS

FILE 'REGISTRY' ENTERED AT 12:18:39 ON 07 APR 2004

FILE 'CAPLUS' ENTERED AT 12:24:48 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:25:29 ON 07 APR 2004

FILE 'CAPLUS' ENTERED AT 12:27:18 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:27:46 ON 07 APR 2004

FILE 'CAPLUS' ENTERED AT 12:28:58 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:30:04 ON 07 APR 2004

FILE 'CAPLUS' ENTERED AT 12:32:01 ON 07 APR 2004

FILE 'REGISTRY' ENTERED AT 12:32:47 ON 07 APR 2004

L44            STRUCTURE UPLOADED

L45            QUE L44

L46            527 S L45 SUB=L41 FUL

L47            383 S L41 NOT L46

FILE 'CAPLUS' ENTERED AT 12:33:28 ON 07 APR 2004

L48            265 S L47

09/976,929

L49           ANALYZE L48 1- RN HIT :       377 TERMS

FILE 'REGISTRY' ENTERED AT 12:34:05 ON 07 APR 2004

L50           3224 S 522-09-8/RN OR 4483-47-0/RN OR 439-22-5/RN OR 226887/RN OR 30

L51           10 S L47 AND L50

L52           373 S L47 NOT L51

FILE 'CAPLUS' ENTERED AT 12:35:33 ON 07 APR 2004

L53           140 S L52

L54           ANALYZE L53 1- RN HIT :       367 TERMS

FILE 'REGISTRY' ENTERED AT 12:37:03 ON 07 APR 2004

L55           STRUCTURE UPLOADED

L56           QUE L55

L57           236 S L56 SUB=L41 FUL

L58           201 S L41 NOT (L57 OR L46)

FILE 'CAPLUS' ENTERED AT 12:39:08 ON 07 APR 2004

L59           48 S L58

FILE 'REGISTRY' ENTERED AT 12:39:25 ON 07 APR 2004

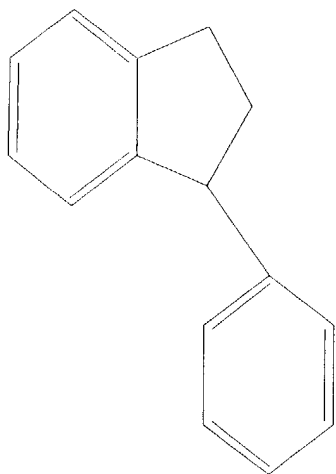
FILE 'CAPLUS' ENTERED AT 12:39:31 ON 07 APR 2004

L60           52 S L39 OR L59

=> d 12

L2 HAS NO ANSWERS

L1           STR



Structure attributes must be viewed using STN Express query preparation.

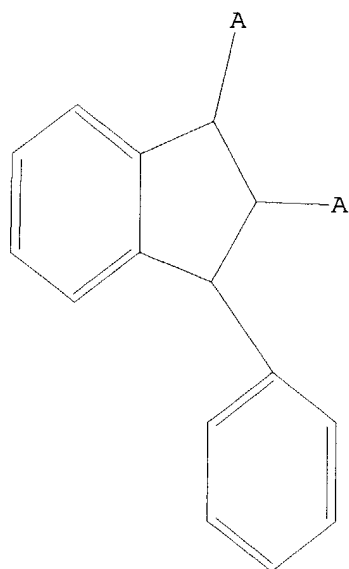
L2           QUE ABB=ON PLU=ON L1

=> d 137

L37 HAS NO ANSWERS

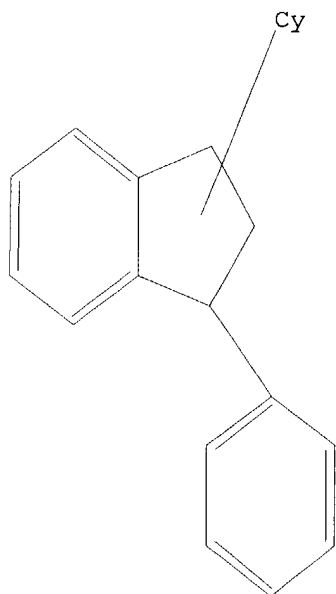
L36           STR

09/976,929



Structure attributes must be viewed using STN Express query preparation.  
L37 QUE ABB=ON PLU=ON L36

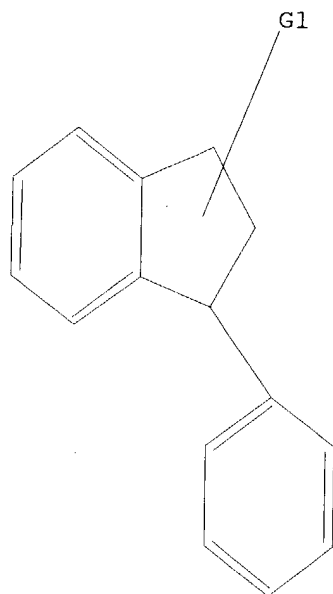
=> d 145  
L45 HAS NO ANSWERS  
L44 STR



Structure attributes must be viewed using STN Express query preparation.  
L45 QUE ABB=ON PLU=ON L44

09/976,929

=> d 156  
L56 HAS NO ANSWERS  
L55 STR



G1 Me, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu

Structure attributes must be viewed using STN Express query preparation.  
L56 QUE ABB=ON PLU=ON L55

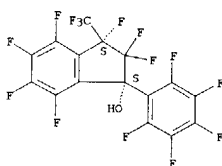
=> d ibib abs hitstr 160 1-52

ANSWER 1 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ABSTRACT NUMBER: 2004:40106 CAPLUS  
 DOCUMENT NUMBER: 140:235477  
 TITLE: The alicyclic ring contraction of perfluoro-1-phenyltetralin in reaction with antimony pentafluoride  
 AUTHOR(S): Sinyakov, Vladimir R.; Mezhenkova, Tatyana V.; Karpov, Victor M.; Platonov, Vyacheslav E.  
 CORPORATE SOURCE: N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry, Novosibirsk, 630090, Russia  
 SOURCE: Journal of Fluorine Chemistry (2004), 125(1), 49-53  
 CODEN: JFLCAR; ISSN: 0022-1139  
 PUBLISHER: Elsevier Science B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Perfluoro-1-phenyltetralin (I) was heated with antimony pentafluoride at 130 °C and then treated with water to give a mixture of perfluoro-3-methyl-2-phenylindene (II), perfluoro-3-methyl-2-phenylindene (III), perfluoro-3-hydroxy-1-methyl-3-phenylindan (IV), perfluoro-1-methyl-3-phenylindan (V), perfluoro-9-methyl-1,2,3,4,5,6,7,8-octahydroanthracene and perfluoro-1,9-dimethyl-5,6,7,8-tetrahydro- $\beta$ -naphthindan. When I was heated with SbF<sub>5</sub> in the presence of HF and then similarly treated with water, only II-V were produced as a mixture. However, when the reaction was performed in the presence of HF at 170 and 200 °C II-V formed together with perfluoro-2-(cyclohexen-1-yl)-3-methylindene.  
 IT 668983-75-3P 668983-76-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (alicyclic ring contraction of perfluorophenyltetralin in the presence of antimony pentafluoride)  
 RN 668983-75-3 CAPLUS  
 CN 1H-Indene, 1,2,2,3,4,5,6,7-heptafluoro-2,3-dihydro-1-(pentafluorophenyl)-3-(trifluoromethyl)-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



ANSWER 2 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ABSTRACT NUMBER: 2004:27310 CAPLUS  
 DOCUMENT NUMBER: 140:71043  
 TITLE: Combination treatment for depression and anxiety by NK1 and NK3 antagonists  
 INVENTOR(S): Sobolov-Jaynes, Susan Beth; Lowe, John Adams, III; McLean, Stafford  
 PATENT ASSIGNEE(S): Pfizer Products Inc., USA  
 SOURCE: PCT Int. Appl., 124 pp.  
 CODEN: PIXX02  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE                       | APPLICATION NO. | DATE     |
|---|------|----------------------------|-----------------|----------|
| WO 2004000355   | A1   | 20031231                   | WO 2003-182516  | 20030610 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |      |                            |                 |          |
| US 2004006135   | A1   | 20040108                   | US 2003-386582  | 20030312 |
| PRIORITY APPL. INFO.:   |      | US 2002-389975P P 20020619 |                 |          |
| OTHER SOURCE(S): MARPAT 140:71043   |      |                            |                 |          |

AB The invention discloses a method for treating depression or anxiety in a mammal, including a human, by administering to the mammal a CNS-penetrant NK1 receptor antagonist (e. g., a substance P receptor antagonist) in combination with an NK3 antagonist agent. It also relates to pharmaceutical compns. containing a pharmaceutically acceptable carrier, a CNS-penetrant NK1 receptor antagonist and an NK3 antagonist.

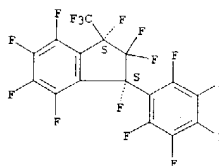
IT 180057-91-4  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (NK1 and NK3 antagonist combination treatment for depression and anxiety)

RN 180057-91-4 CAPLUS  
 CN Piperazine, 1-[[[(1R,2R,3S)-1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(4-methoxyphenyl)-1H-inden-2-yl]carbonyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

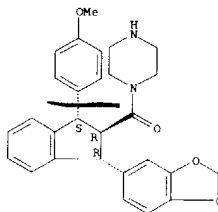
L60 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 RN 668983-76-4 CAPLUS  
 CN 1H-Indene, 1,2,2,3,4,5,6,7-octafluoro-2,3-dihydro-1-(pentafluorophenyl)-3-(trifluoromethyl)-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

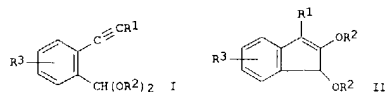
L60 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

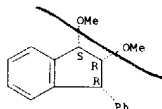
**ANSWER 3 OF 52** CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:935635 CAPLUS  
 DOCUMENT NUMBER: 138:287377  
 TITLE: Indenol ether formation from arylalkynes bearing ortho-acetals: an unprecedented rearrangement in palladium-catalyzed carbalkoxylation  
 AUTHOR(S): Nakamura, Itaru; Bajracharya, Gan B.; Mizushima, Yuya; Yamamoto, Yoshinori  
 CORPORATE SOURCE: Department of Chemistry, Graduate School of Science, Tohoku University, Sendai, 980-8578, Japan  
 SOURCE: Angewandte Chemie, International Edition (2002), 41(22), 4328-4331  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:287377  
 GI

**ANSWER 3 OF 52** CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



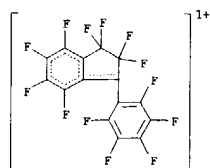
**AB** In the presence of 10 mol % (MeCN)2PdCl2, acetal-containing arylalkynes I (R1 = Pr, hexyl, cyclohexyl, Ph, etc.; R2 = Me, Et, Bu; R3 = H, 4-CF3, 5-CF3, 4-Me) cyclized to II in 40-87% yield. A mechanistic study showed that R1 migrated to the other acetylenic carbon during the rearrangement.  
**IT** 506409-74-1P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure: indenol ether formation from arylalkynes bearing ortho-acetals involving rearrangement in palladium-catalyzed carbalkoxylation)  
 RN 506409-74-1 CAPLUS  
 CN 1H-Indene, 2,3-dihydro-1,2-dimethoxy-3-phenyl-, (1R,2S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



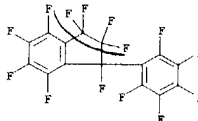
REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS

**ANSWER 4 OF 52** CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:846468 CAPLUS  
 DOCUMENT NUMBER: 138:353722  
 TITLE: Pentafluorophenylation of Perfluorinated Benzocyclobutene, Indan, and Tetralin by Reaction with Pentafluorobenzene in SbF5  
 AUTHOR(S): Karpov, V. M.; Mezhenkova, T. V.; Platonov, V. E.; Sinyakov, V. R.; Shchegoleva, L. N.  
 CORPORATE SOURCE: Siberian Department, Vozrozhdeniya Novosibirsk Institute of Organic Chemistry, Russian Academy of Sciences, Novosibirsk, 630090, Russia  
 SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2002), 38(8), 1158-1165  
 CODEN: RUOCEQ; ISSN: 1070-4280  
 PUBLISHER: MAIK Nauka/Interperiodica Publishing  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:353722  
**AB** The reactivity of perfluorinated benzocyclobutene, indan, and tetralin in reaction with pentafluorobenzene in SbF5 medium, and also the relative stability of generated therewith perfluoro-1-phenylbenzocycloalkenyl cations decrease with increasing alicyclic fragment in the benzocycloalkene. Treating the solns. of salts of the above cations with anhydrous HF results in the corresponding perfluoro-1-phenylbenzocycloalkenes, and the hydrolysis of salts furnishes their 1-hydroxy deriva. In a reaction of 1-hydroxypentafluoro-1-phenylbenzocyclobutene, -indan, and -tetralin with SOCl2 the hydroxy group is replaced by chlorine. Besides with indan and tetralin deriva. form 7-pentafluorophenylheptafluoro-3-chlorobicyclo[4.3.0]hepta-1,4,6-triene and 7-pentafluorophenyldecafluoro-3-chlorobicyclo[4.4.0]octa-1,4,6-triene, resp.  
**IT** 519162-99-3P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and stability of phenylbenzocycloalkanes via pentafluorophenylation of perfluorinated benzocyclobutene, indan, and tetralin by reaction with pentafluorobenzene in antimony pentafluoride)  
 RN 519162-99-3 CAPLUS  
 CN 1H-Indenyl, 1,1,2,2,4,5,6,7-octafluoro-2,3-dihydro-3-(pentafluorophenyl)- (9CI) (CA INDEX NAME)

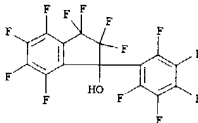


**IT** 333800-16-1P 333800-18-3P 519059-88-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of phenylbenzocycloalkanes via pentafluorophenylation of

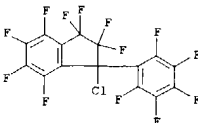
**ANSWER 4 OF 52** CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 perfluorinated benzocyclobutene, indan, and tetralin by reaction with pentafluorobenzene in antimony pentafluoride)  
 RN 333800-16-1 CAPLUS  
 CN 1H-Indene, 1,1,2,2,3,4,5,6,7-nonafluoro-2,3-dihydro-3-(pentafluorophenyl)- (9CI) (CA INDEX NAME)



RN 333800-18-3 CAPLUS  
 CN 1H-Inden-1-yl, 2,2,3,3,4,5,6,7-octafluoro-2,3-dihydro-1-(pentafluorophenyl)- (9CI) (CA INDEX NAME)



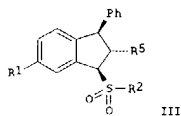
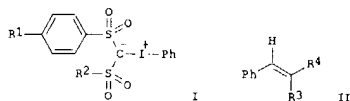
RN 519059-88-2 CAPLUS  
 CN 1H-Indene, 1-chloro-2,2,3,3,4,5,6,7-octafluoro-2,3-dihydro-1-(pentafluorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 SUBMISSION NUMBER: 2002:806275 CAPLUS  
 DOCUMENT NUMBER: 138:187493  
 TITLE: A stereoselective and regioselective synthesis of

trans,trans-configured 1,2,3-trisubstituted indanes:  
 cycloaddition of alkenes with iodonium ylides of  
 $\beta$ -disulfones  
 AUTHOR(S): Adam, Waldemar; Bosio, Sara G.; Gogonas, Elestathios  
 P.; Hadjilapoglou, Lazaros P.  
 CORPORATE SOURCE: Institut für Organische Chemie, Universität Würzburg,  
 Würzburg, 97074, Germany  
 SOURCE: Synthesis (2002), (14), 2084-2090  
 CODEN: SYNTBF; ISSN: 0039-7881  
 PUBLISHER: Georg Thieme Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:187493  
 GI

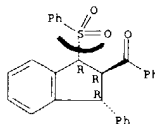


AB The reaction of phenyliodonium-bis(sulfonyl) methylides I ( $R_1 = H$ ,  $R_2 = Ph$ ;  $R_1 = Me$ ,  $R_2 = Me$ , 4-MeC6H4) with alkenes II ( $R_3 = Ph$ ,  $R_4 = H$ ;  $R_3 = H$ ,  $R_4 = Ph$ , Me, PhCO) affords the multiply trisubstituted indanes III ( $R_1 = H$ ,  $R_2 = Ph$ ,  $R_5 = Ph$ , Me, PhCO;  $R_1 = Me$ ,  $R_2 = Me$ , 4-MeC6H4,  $R_5 = Ph$ , Me) in moderate to good yields, through an unusual cycloaddn. The present stereoselective and regioselective cycloaddn. provides a convenient preparative route to trans,trans-configured 1,2,3-trisubstituted indanes, in which the benzene ring derives from the arenesulfonyl functionality of the bis(sulfonyl)iodonium ylide. The mechanistically puzzling structural feature is the fact (X-ray structure) that the para-Me substituent of the original p-toluenesulfonyl group in the iodonium ylide is located in the C-6 position of the resulting indane benzene ring, i.e., a meta relationship with respect to the original methylene carbon atom.

IT 499203-14-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

L60 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 (stereo- and regioselective prepn. of trans,trans-trisubstituted  
 indanes via cycloaddn. of aryl alkenes with  $\beta$ -disulfonyl iodonium  
 ylides)  
 RN 499203-14-4 CAPLUS  
 CN Methanone, [(1R,2R,3R)-2,3-dihydro-1-phenyl-3-(phenylsulfonyl)-1H-inden-2-yl]phenyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

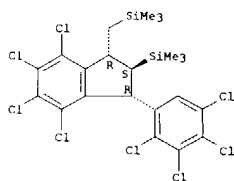
L60 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 SUBMISSION NUMBER: 2002:582028 CAPLUS  
 DOCUMENT NUMBER: 137:279236  
 TITLE: Friedel-Crafts Alkylation of Polychlorobenzenes with  
 (1,2-Dichloroethyl)trichlorosilane  
 AUTHOR(S): Han, Joon Soor; Lim, Won Cheol; Yoo, Bok Ryul; Jin,  
 Jung-Il; Jung, Il Nam  
 CORPORATE SOURCE: Organosilicon Chemistry Laboratory, Korea Institute of  
 Science and Technology, Seoul, 130-650, S. Korea  
 SOURCE: Organometallics (2002), 21(18), 3803-3809  
 CODEN: ORGN07; ISSN: 0276-7333  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 137:279236

AB (1,2-Dichloroethyl)trichlorosilane (2) reacted with a 6-fold excess of mono-, di-, and trichlorobenzenes at 120° in the presence of aluminum chloride to give regiospecific (2,2-diarylethyl)trichlorosilanes via a carbocation rearrangement. The yields were 61-69%, and regioisomers of (1,2-diarylethyl)silanes were not obtained. Alkylation of 1,2,3,4-tetrachlorobenzene with 2 did not give [2,2-bis(tetrachlorophenyl)ethyl]trichlorosilane or 9,10-bis(silyl)methyl-9,10-dihydroanthracenes but gave cyclic silyl-substituted indanes in 84% yield via the acid-catalyzed dimerization of  $\beta$ -(trichlorosilyl)styrene formed by the first alkylation, followed by dehydrochlorination. The structure of 1,2-trans-2,3-trans-4,5,6,7-tetrachloro-1-(2,3,4,5-tetrachlorophenyl)-2-((trichlorosilyl)-3-((trichlorosilyl)methyl)indane has been determined by x-ray crystallog. The desilylated product, 1,3-cis-4,5,6,7-tetrachloro-1-(2,3,4,5-tetrachlorophenyl)-3-((trichlorosilyl)methyl)indane, was reduced by LiAlH4, and its structure was also determined.

IT 464173-79-3P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and crystal structure of)

RN 464173-79-3 CAPLUS  
 CN Silane, trimethyl[(1R,2S,3R)-4,5,6,7-tetrachloro-2,3-dihydro-3-(2,3,4,5-tetrachlorophenyl)-2-(trimethylsilyl)-1H-inden-1-yl]methyl-, rel- (9CI) (CA INDEX NAME)

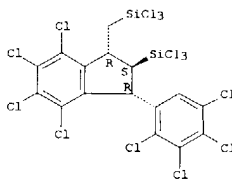
Relative stereochemistry.



IT 464173-75-9P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation, crystal structure, and Grignard methylation of)

L60 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 RN 464173-75-9 CAPLUS  
 CN Silane, trichloro[(1R,2S,3R)-4,5,6,7-tetrachloro-2,3-dihydro-3-(2,3,4,5-tetrachlorophenyl)-2-(trichlorosilyl)-1H-inden-1-yl]methyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

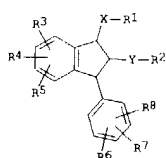


09/976,929  
applicant

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:293637 CAPLUS  
DOCUMENT NUMBER: 136:325563  
TITLE: Preparation of aryl-indane compounds as inhibitors of P-glycoprotein-mediated transport  
INVENTOR(S): Melikian-Badalian, Anita  
PATENT ASSIGNER(S): Avlan Limited, UK  
SOURCE: PCT Int. Appl., 87 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

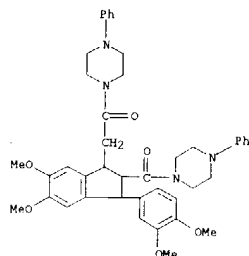
| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2002030915 | A2   | 20020418 | WO 2001-US32017 | 20011011 |
| WO 2002030915 | A3   | 20030327 |                 |          |

W: AR, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BU, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
AU 2002024372 A5 20020422 AU 2002-24372 20011011  
US 2002128231 A1 20020912 US 2001-976929 20011011  
PRIORITY APPL. INFO.: US 2000-240345P P 20001011  
WO 2001-US32017 W 20011011  
OTHER SOURCE(S): MARPAT 136:325563  
GI



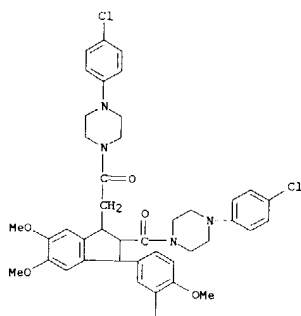
AB The title comps. [I: R1, R2 = OR9, NR10R11; R3-R8 = H, alkyl, Ph, etc.; R9 = alkylene, alkenylene, alkylidene, etc., all of which may be (un)substituted; R10, R11 = alkylene, alkenylene, phenylene, etc., all of which may be (un)substituted; X, Y = CH2, CO, CH2SO2, etc.] which may be used as inhibitors of P-glycoprotein-mediated transport, were prepared

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-11-8 CAPLUS  
CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2-[[[4-(4-chlorophenyl)-1-piperazinyl]carbonyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]-4-phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

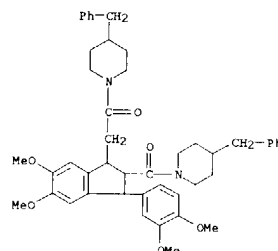


L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
Thus, reacting 1-carboxymethyl-3-(3,4-dimethoxyphenyl)-5,6-dimethoxyindan-2-carboxylic acid with 4-benzylpiperidine in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide, HCl, Et3N and dimethylaminopyridine in THF afforded 37% I [X = CH2CO; Y = CO; R1, R2 = 4-benzylpiperidin-1-yl; R3 = 5-MeO; R4 = 6-MeO; R5 = H; R6 = 3-MeO; R7 = 4-MeO; R8 = H] which showed 81.4% inhibition of Rhodamine 123 transport. Use of the compds. I to enhance bioavailability and to modulate multi drug resistance to chemotherapeutic agents is disclosed.

IT 412315-07-2P 412315-08-3P 412315-11-8P  
412315-12-2P 412315-15-2P 412315-40-3P  
412315-41-4P 412315-56-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(Preparation of aryl-indane compds. as inhibitors of P-glycoprotein-mediated transport)

RN 412315-07-2 CAPLUS  
CN Piperidine, 1-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[[4-(phenylmethyl)-1-piperidinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-phenylmethyl]- (9CI) (CA INDEX NAME)



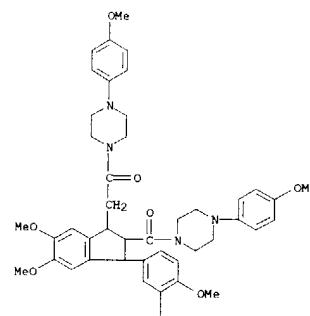
RN 412315-08-3 CAPLUS  
CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[[4-(phenyl-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-phenyl]- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

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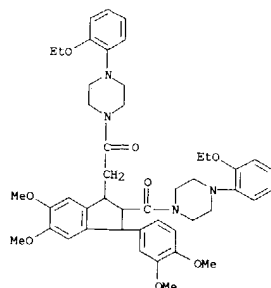
RN 412315-12-9 CAPLUS  
CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[[4-(4-methoxyphenyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

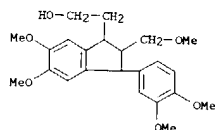


PAGE 2-A

RN 412315-15-2 CAPLUS  
CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2-[[[2-(ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



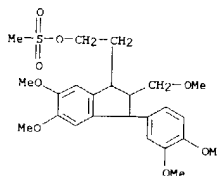
RN 412315-40-3 CAPLUS  
CN 1H-Indene-1-ethanol, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)- (9CI) (CA INDEX NAME)



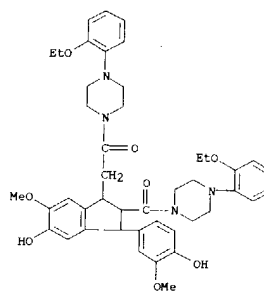
RN 412315-41-4 CAPLUS  
CN 1H-Indene-1-ethanol, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-, methanesulfonate (9CI) (CA INDEX NAME)

514-252.11

544-357



RN 412315-56-1 CAPLUS  
CN Piperazine, 1-(2-ethoxyphenyl)-4-[[2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-1H-inden-1-yl]acetyl]- (9CI) (CA INDEX NAME)



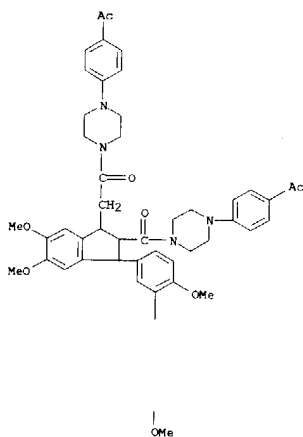
IT 412315-09-4P 412315-10-7P 412315-13-0P  
412315-14-1P 412315-16-3P 412315-17-4P  
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412315-21-0P 412315-22-1P 412315-23-2P  
412315-24-3P 412315-25-4P 412315-26-5P  
412315-27-6P 412315-28-7P 412315-29-8P  
412315-30-1P 412315-31-2P 412315-32-3P  
412315-33-4P 412315-34-5P 412315-35-6P  
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412315-42-5P 412315-43-6P 412315-44-7P  
412315-45-8P 412315-46-9P 412315-47-0P  
412315-48-1P 412315-49-2P 412315-50-5P

412315-51-6P 412315-54-9P 412315-59-4P  
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412315-83-4P 412315-84-5P 412315-85-6P  
412315-86-7P 412315-87-8P 412315-88-9P  
412315-89-0P 412315-90-3P 412315-91-4P  
412315-92-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BTOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aryl-indane compds. as inhibitors of P-glycoprotein-mediated transport)

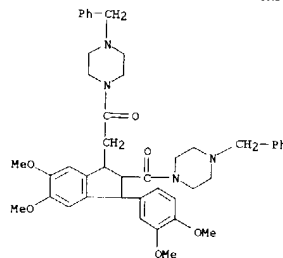
RN 412315-09-4 CAPLUS  
CN Piperazine, 1-(4-acetylphenyl)-4-[[2-[[4-(4-acetylphenyl)-1-piperazinyl]carbonyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]- (9CI) (CA INDEX NAME)



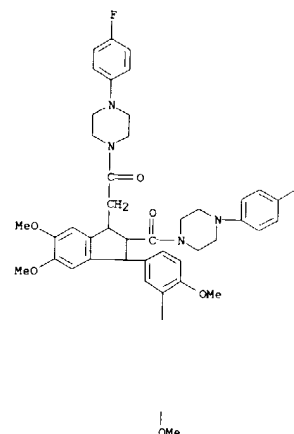
PAGE 1-A

PAGE 2-A

RN 412315-10-7 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-(phenylmethyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 412315-13-0 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)



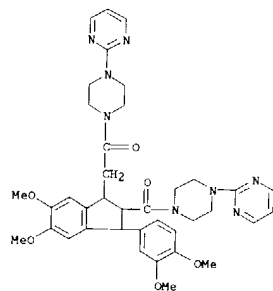
PAGE 1 A

PAGE 2-A

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

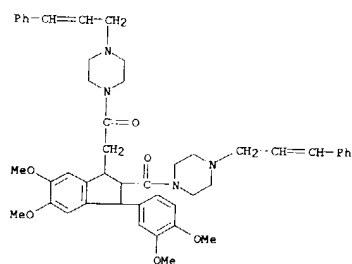
RN 412315-14-1 CAPLUS

CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-(2-pyrimidinyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(2-pyrimidinyl)- (9CI) (CA INDEX NAME)

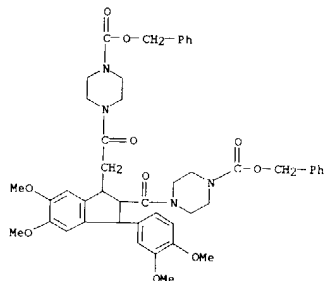


RN 412315-16-3 CAPLUS

CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-(3-phenyl-2-propenyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(3-phenyl-2-propenyl)- (9CI) (CA INDEX NAME)

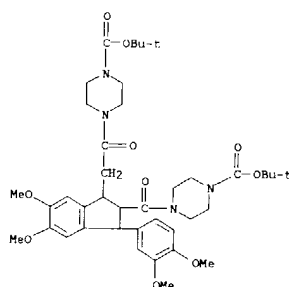


L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-20-9 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[[3-(3,4-dimethoxyphenyl)-2-[[4-[(1,1-dimethylethoxy)carbonyl]-1-piperazinyl]carbonyl]-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



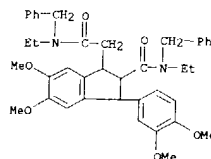
RN 412315-21-0 CAPLUS

CN 1H-Indene-1-acetamide, 3-(3,4-dimethoxyphenyl)-2-[(dimethylamino)carbonyl]-2,3-dihydro-5,6-dimethoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

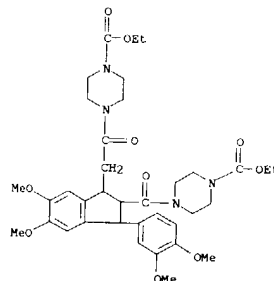
RN 412315-17-4 CAPLUS

CN 1H-Indene-1-acetamide, 3-(3,4-dimethoxyphenyl)-N-ethyl-2-[[ethyl(phenylmethyl)amino]carbonyl]-2,3-dihydro-5,6-dimethoxy-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 412315-18-5 CAPLUS

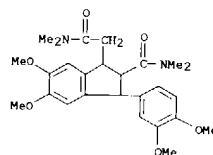
CN 1-Piperazinecarboxylic acid, 4-[[[3-(3,4-dimethoxyphenyl)-2-[[4-(ethoxycarbonyl)-1-piperazinyl]carbonyl]-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 412315-19-6 CAPLUS

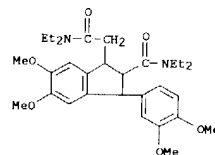
CN 1-Piperazinecarboxylic acid, 4-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-oxo-2-[4-[(phenylmethoxy)carbonyl]-1-piperazinyl]ethyl]-1H-inden-2-yl]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



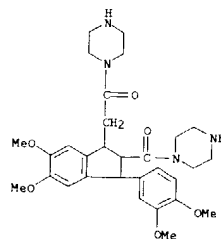
RN 412315-22-1 CAPLUS

CN 1H-Indene-1-acetamide, 2-[(diethylamino)carbonyl]-3-(3,4-dimethoxyphenyl)-N,N-diethyl-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)



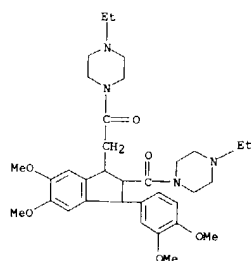
RN 412315-23-2 CAPLUS

CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]- (9CI) (CA INDEX NAME)

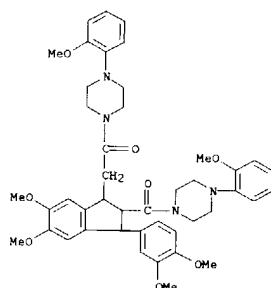


RN 412315-24-3 CAPLUS

CN Piperazine, 1-[[[3-(3,4-dimethoxyphenyl)-2-[[4-ethyl-1-piperazinyl]carbonyl]-2,3-dihydro-5,6-dimethoxy-1H-inden-1-yl]acetyl]-4-

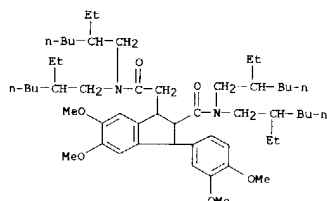
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
ethyl- (9CI) (CA INDEX NAME)

RN 412315-25-4 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-(2-methoxyphenyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

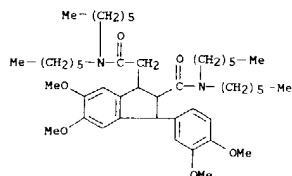


RN 412315-26-5 CAPLUS  
CN 1H-Indene-1-acetamide, 3-(3,4-dimethoxyphenyl)-2-[[bis(2-methoxyphenyl)amino]carbonyl]-2,3-dihydro-5,6-dimethoxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

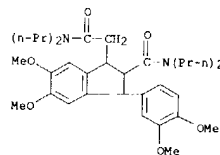


RN 412315-30-1 CAPLUS  
CN 1H-Indene-1-acetamide, 2-[[bis(2-ethylhexyl)amino]carbonyl]-3-(3,4-dimethoxyphenyl)-N,N-bis(2-ethylhexyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

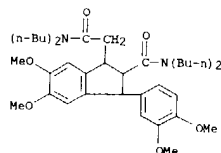


RN 412315-31-2 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-(2-pyridinyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

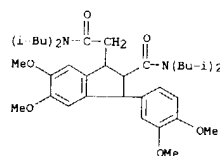
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-27-6 CAPLUS  
CN 1H-Indene-1-acetamide, N,N-dibutyl-2-[[bis(2-methoxyphenyl)amino]carbonyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

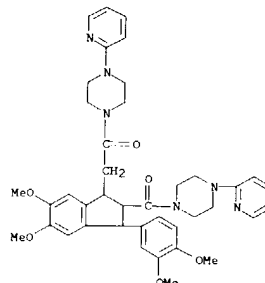


RN 412315-28-7 CAPLUS  
CN 1H-Indene-1-acetamide, 2-[[bis(2-methoxyphenyl)amino]carbonyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-N,N-bis(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



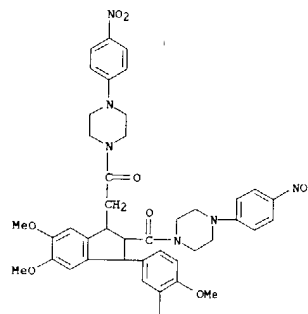
RN 412315-29-8 CAPLUS  
CN 1H-Indene-1-acetamide, 2-[[bis(2-ethylhexyl)amino]carbonyl]-3-(3,4-dimethoxyphenyl)-N,N-bis(2-ethylhexyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



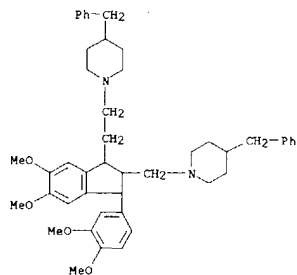
RN 412315-32-3 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-(4-nitrophenyl)-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(4-nitrophenyl)- (9CI) (CA INDEX NAME)

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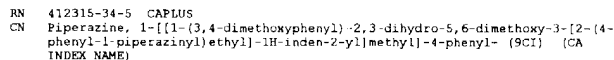
RN 412315-33-4 CAPLUS

CN Piperidine, 1-[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-(4-phenylmethyl)-1-piperidinylethyl]-1H-inden-2-yl]methyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



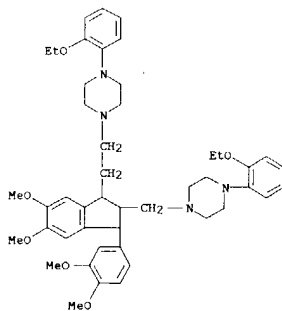
RN 412315-34-5 CAPLUS

CN Piperazine, 1-[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-(4-phenyl-1-piperazinylethyl)-1H-inden-2-yl]methyl]-4-phenyl]- (9CI) (CA INDEX NAME)



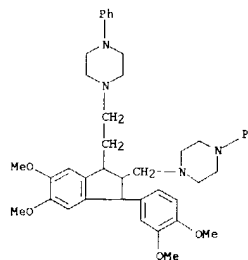
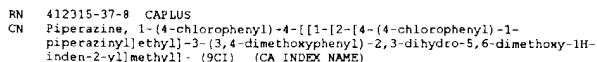
RN 412315-36-7 CAPLUS

CN Piperazine, 1-[[1-(3,4-dimethoxyphenyl)-3-[2-(4-(2-ethoxyphenyl)-1-piperazinylethyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-2-yl]methyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



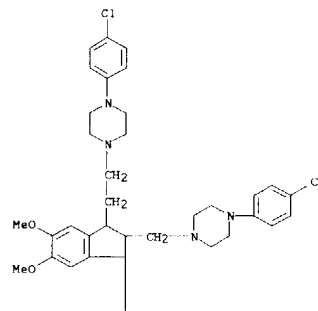
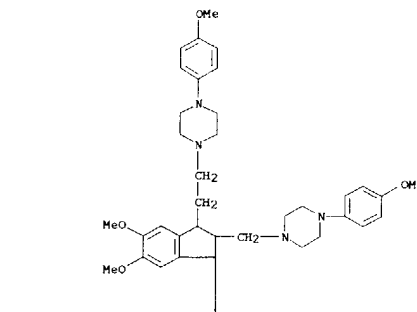
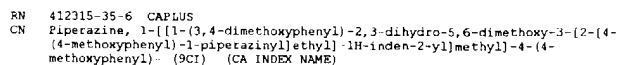
RN 412315-37-8 CAPLUS

CN Piperazine, 1-[[1-(4-chlorophenyl)-4-[[1-[2-(4-(4-chlorophenyl)-1-piperazinylethyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-2-yl]methyl]- (9CI) (CA INDEX NAME)



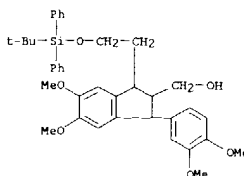
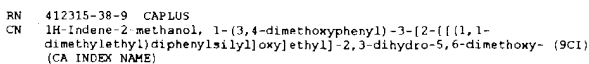
RN 412315-35-6 CAPLUS

CN Piperazine, 1-[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-(4-(4-methoxyphenyl)-1-piperazinylethyl)-1H-inden-2-yl]methyl]-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

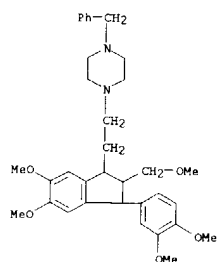


RN 412315-38-9 CAPLUS

CN 1H-Indene-2-methanol, 1-(3,4-dimethoxyphenyl)-3-[2-[[1,1-dimethylethyl]diphenylsilyloxy]ethyl]-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)



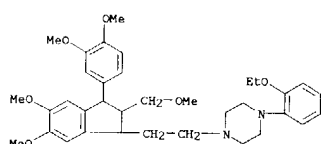
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 RN 412315-42-5 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



514-252.12

544-398

RN 412315-43-6 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)

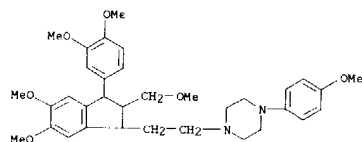


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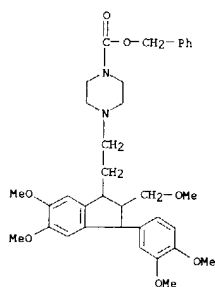
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RN 412315-44-7 CAPLUS  
 CN Piperidine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



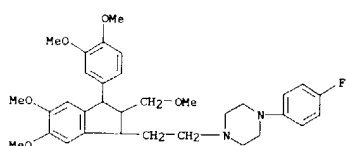
RN 412315-47-0 CAPLUS  
 CN 1-Piperazinecarboxylic acid, 4-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



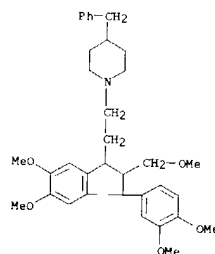
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544-384

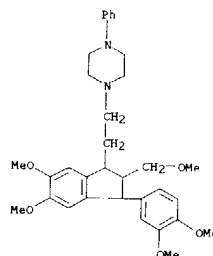
RN 412315-48-1 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)



L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



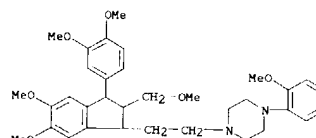
RN 412315-45-8 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-phenyl- (9CI) (CA INDEX NAME)



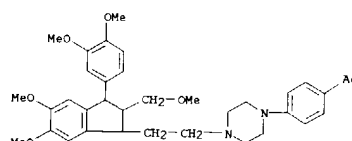
RN 412315-46-9 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

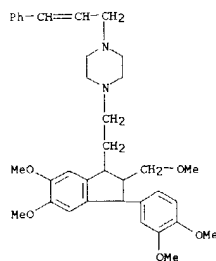
RN 412315-49-2 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-1-piperazinylphenyl- (9CI) (CA INDEX NAME)



RN 412315-50-5 CAPLUS  
 CN Ethanone, 1-[4-[4-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)



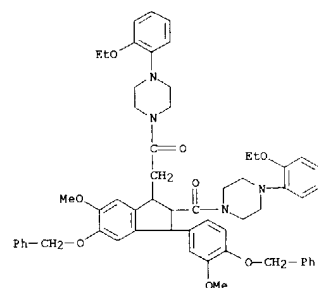
RN 412315-51-6 CAPLUS  
 CN Piperazine, 1-[2-[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl]ethyl]-4-(3-phenyl-2-propenyl)- (9CI) (CA INDEX NAME)



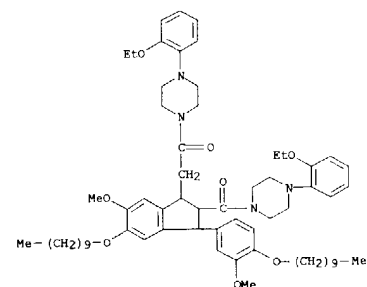
514-252.12

544-398

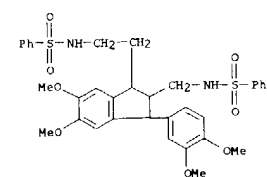
RN 412315-54-9 CAPLUS  
 CN Piperazine, 1-[(2-ethoxyphenyl)-4-[[2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-6-methoxy-3-[3-methoxy-4-(phenylmethoxy)phenyl]-5-(phenylmethoxy)-1H-inden-1-yl]acetyl]- (9CI) (CA INDEX NAME)



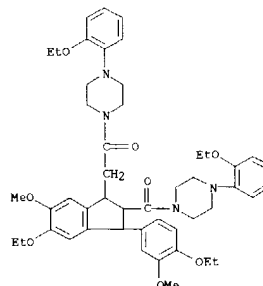
RN 412315-59-4 CAPLUS  
 CN Piperazine, 1-[[5-ethoxy-3-(4-ethoxy-3-methoxyphenyl)-2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-6-methoxy-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 412315-70-9 CAPLUS  
 CN Benzenesulfonamide, N-[[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-[(phenylsulfonyl)amino]ethyl]-1H-inden-2-yl]methyl]- (9CI) (CA INDEX NAME)



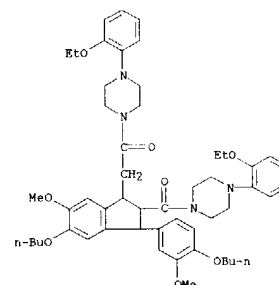
RN 412315-71-0 CAPLUS  
 CN Urea, N-[[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-[[[(phenylmethyl)amino]carbonyl]amino]ethyl]-1H-inden-2-yl]methyl]-N'-[(phenylmethyl)- (9CI) (CA INDEX NAME)



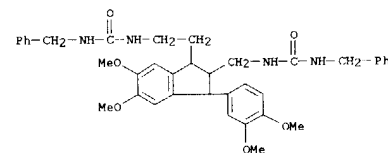
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544-357

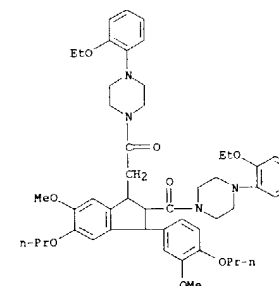
RN 412315-62-9 CAPLUS  
 CN Piperazine, 1-[[5-butoxy-3-(4-butoxy-3-methoxyphenyl)-2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-6-methoxy-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



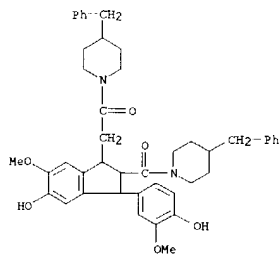
RN 412315-65-2 CAPLUS  
 CN Piperazine, 1-[[5-(decyloxy)-3-(4-(decyloxy)-3-methoxyphenyl)-2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-6-methoxy-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



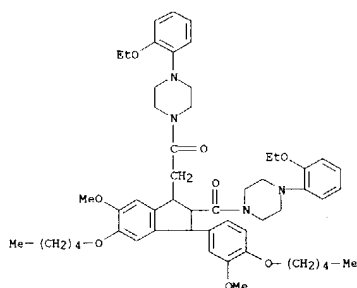
RN 412315-74-3 CAPLUS  
 CN Piperazine, 1-(2-ethoxyphenyl)-4-[[2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-6-methoxy-3-(3-methoxy-4-propoxyphenyl)-5-propoxy-1H-inden-1-yl]acetyl]- (9CI) (CA INDEX NAME)



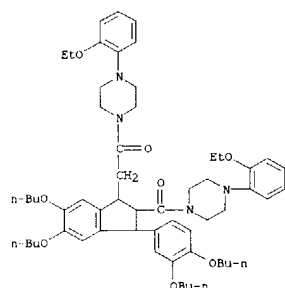
RN 412315-76-5 CAPLUS  
 CN Piperidine, 1-[[[2,3-dihydro-5-hydroxy-3-[4-hydroxy-3-methoxyphenyl]-6-methoxy-2-[[4-(phenylmethyl)-1-piperidinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



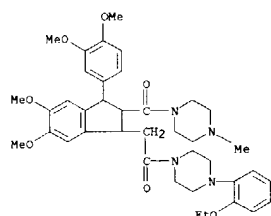
RN 412315-77-6 CAPLUS  
CN Piperazine, 1-[(2-ethoxyphenyl)-4-[[2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-6-methoxy-3-[3-methoxy-4-(pentyloxy)phenyl]-5-(pentyloxy)-1H-inden-1-yl]acetyl]- (9CI) (CA INDEX NAME)



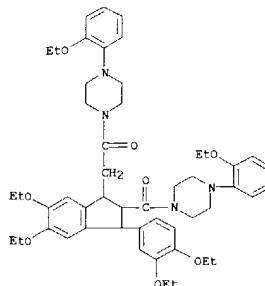
RN 412315-79-8 CAPLUS  
CN Piperazine, 1-[[3-(3,4-diethoxyphenyl)-5,6-diethoxy-2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



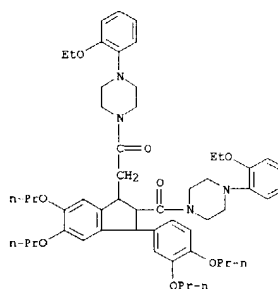
RN 412315-84-5 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[4-methyl-1-piperazinyl]carbonyl]-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



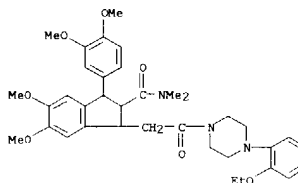
RN 412315-85-6 CAPLUS  
CN 1H-Indene-2-carboxamide, 1-(3,4-dimethoxyphenyl)-3-[2-[[4-(2-ethoxyphenyl)-1-piperazinyl]-2-oxoethyl]-2,3-dihydro-5,6-dimethoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)



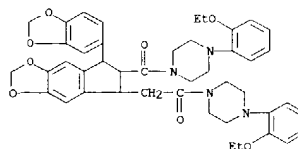
RN 412315-81-2 CAPLUS  
CN Piperazine, 1-[[3-(3,4-dipropoxyphenyl)-2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-5,6-dipropoxy-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 412315-83-4 CAPLUS  
CN Piperazine, 1-[[5,6-dibutoxy-3-(3,4-dibutoxyphenyl)-2-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-2,3-dihydro-1H-inden-1-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



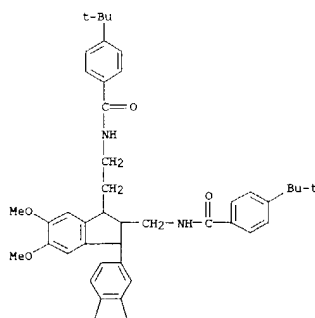
RN 412315-86-7 CAPLUS  
CN Piperazine, 1-[[7-(1,3-benzodioxol-5-yl)-6-[[4-(2-ethoxyphenyl)-1-piperazinyl]carbonyl]-6,7-dihydro-5H-indeno[5,6-d]-1,3-dioxol-5-yl]acetyl]-4-(2-ethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 412315-87-8 CAPLUS  
CN Benzamide, N-[[1-(3,4-dimethoxyphenyl)-3-[2-[[4-(1,1-dimethylethyl)benzoyl]amino]ethyl]-2,3-dihydro-5,6-dimethoxy-1H-inden-2-yl]methyl]-4-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



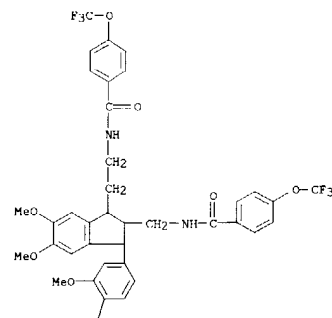
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RN 412315-88-9 CAPLUS  
 CN Benzamide, N-[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-[[4-(trifluoromethoxy)benzoyl]amino]ethyl]-1H-inden-2-yl]methyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

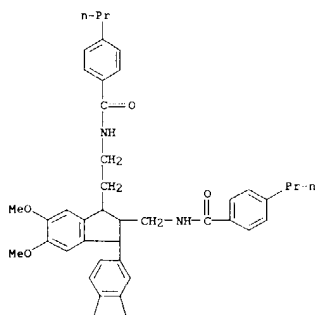
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RN 412315-89-0 CAPLUS  
 CN Benzamide, N-[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-[[4-(trifluoromethoxy)benzoyl]amino]ethyl]-1H-inden-2-yl]methyl]-4-propyl- (9CI) (CA INDEX NAME)

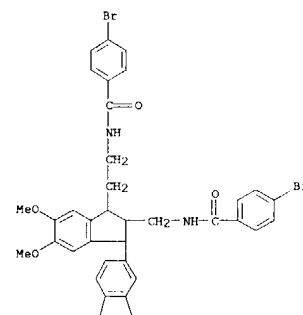
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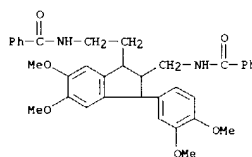
RN 412315-90-3 CAPLUS  
 CN Benzamide, 4-bromo-N-[[1-[2-[[4-bromobenzoyl]amino]ethyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-2-yl]methyl]- (9CI) (CA INDEX NAME)

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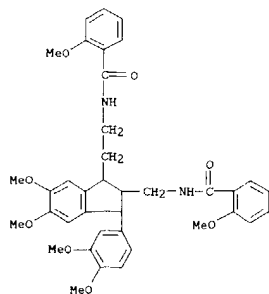
PAGE 2-A

RN 412315-91-4 CAPLUS  
 CN Benzamide, N-[[1-[2-(benzoylamino)ethyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-1H-inden-2-yl]methyl]- (9CI) (CA INDEX NAME)



RN 412315-92-5 CAPLUS  
 CN Benzamide, N-[[1-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-3-[2-[[2-methoxybenzoyl]amino]ethyl]-1H-inden-2-yl]methyl]-2-methoxy- (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

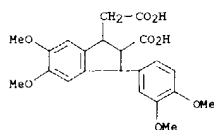


IT 53669-41-3 412315-93-6 412315-94-7

412315-97-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of aryl-indane compds. as inhibitors of  
 P-glycoprotein-mediated  
 transport)

RN 53669-41-3 CAPLUS

CN 1H-Indene-1-acetic acid, 2-carboxy-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)



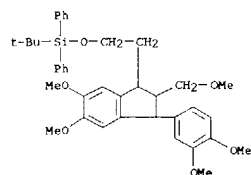
RN 412315-93-6 CAPLUS

CN 1H-Indene-1-acetic acid, 2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-2-(methoxycarbonyl)-, methyl ester (9CI) (CA INDEX NAME)

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

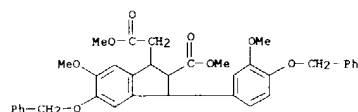
RN 412315-39-0 CAPLUS

CN Silane, [2-{3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxymethyl)-1H-inden-1-yl}ethoxy] (1,1-dimethylethyl)diphenyl- (9CI) (CA INDEX NAME)



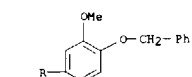
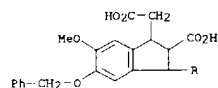
RN 412315-52-7 CAPLUS

CN 1H-Indene-1-acetic acid, 2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-3-[3-methoxy-4-(phenylmethoxy)phenyl]-5-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



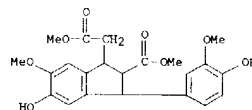
RN 412315-53-8 CAPLUS

CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-6-methoxy-3-[3-methoxy-4-(phenylmethoxy)phenyl]-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



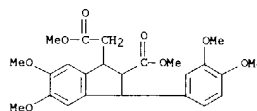
RN 412315-55-0 CAPLUS

L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



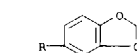
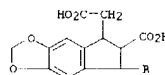
RN 412315-94-7 CAPLUS

CN 1H-Indene-1-acetic acid, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxycarbonyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 412315-97-0 CAPLUS

CN 5H-Indeno[5,6-d]-1,3-dioxole-5-acetic acid, 7-(1,3-benzodioxol-5-yl)-6-carboxy-6,7-dihydro- (9CI) (CA INDEX NAME)



IT 412315-39-0P 412315-52-7P 412315-53-8P

412315-55-0P 412315-57-2P 412315-58-3P

412315-60-7P 412315-61-8P 412315-63-0P

412315-64-1P 412315-66-3P 412315-67-4P

412315-68-5P 412315-69-6P 412315-72-1P

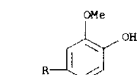
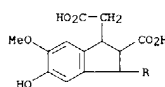
412315-73-2P 412315-75-4P 412315-78-7P

412315-80-1P 412315-82-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of aryl-indane compds. as inhibitors of  
 P-glycoprotein-mediated  
 transport)

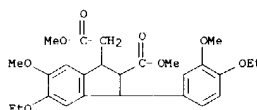
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy- (9CI) (CA INDEX NAME)



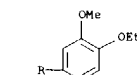
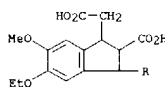
RN 412315-57-2 CAPLUS

CN 1H-Indene-1-acetic acid, 5-ethoxy-3-(4-ethoxy-3-methoxyphenyl)-2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 412315-58-3 CAPLUS

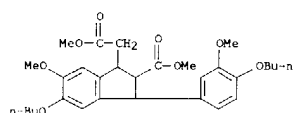
CN 1H-Indene-1-acetic acid, 2-carboxy-5-ethoxy-3-(4-ethoxy-3-methoxyphenyl)-2,3-dihydro-6-methoxy- (9CI) (CA INDEX NAME)



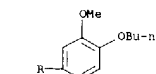
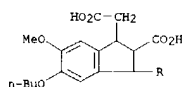
RN 412315-60-7 CAPLUS

CN 1H-Indene-1-acetic acid, 5-butoxy-3-(4-butoxy-3-methoxyphenyl)-2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-, methyl ester (9CI) (CA INDEX NAME)

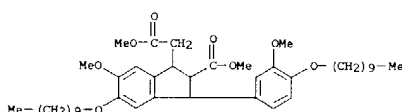
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-61-8 CAPLUS  
CN 1H-Indene-1-acetic acid, 5-(4-butoxy-3-(4-butoxy-3-methoxyphenyl)-2-carboxy-2,3-dihydro-6-methoxy- (9CI) (CA INDEX NAME)

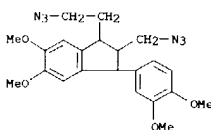


RN 412315-63-0 CAPLUS  
CN 1H-Indene-1-acetic acid, 5-(decyloxy)-3-[4-(decyloxy)-3-methoxyphenyl]-2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-, methyl ester (9CI) (CA INDEX NAME)

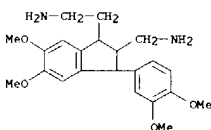


RN 412315-64-1 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-5-(decyloxy)-3-[4-(decyloxy)-3-methoxyphenyl]-2,3-dihydro-6-methoxy- (9CI) (CA INDEX NAME)

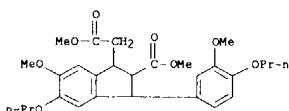
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-69-6 CAPLUS  
CN 1H-Indene-1-ethanamine, 2-(aminomethyl)-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

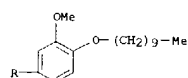
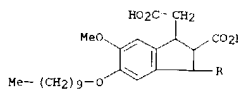


RN 412315-72-1 CAPLUS  
CN 1H-Indene-1-acetic acid, 2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-3-(3-methoxy-4-propoxyphenyl)-5-propoxy-, methyl ester (9CI) (CA INDEX NAME)

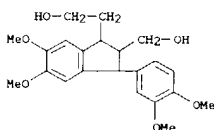


RN 412315-73-2 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-6-methoxy-3-(3-methoxy-4-propoxyphenyl)-5-propoxy- (9CI) (CA INDEX NAME)

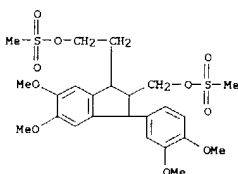
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-66-3 CAPLUS  
CN 1H-Indene-1-ethanol, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-2-(hydroxymethyl)-5,6-dimethoxy- (9CI) (CA INDEX NAME)

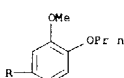
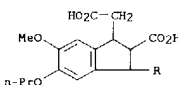


RN 412315-67-4 CAPLUS  
CN 1H-Indene-1-ethanol, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-[[methanesulfonyl]oxy]methyl-, methanesulfonate (9CI) (CA INDEX NAME)

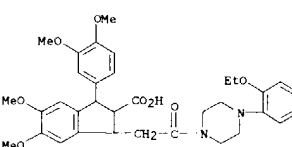


RN 412315-68-5 CAPLUS  
CN 1H-Indene, 1-(2-azidoethyl)-2-(azidomethyl)-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

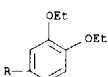
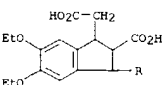
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-75-4 CAPLUS  
CN 1H-Indene-2-carboxylic acid, 1-(3,4-dimethoxyphenyl)-3-[2-[4-(2-ethoxyphenyl)-1-piperazinyl]-2-oxoethyl]-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

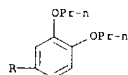
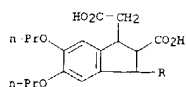


RN 412315-78-7 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-3-(3,4-diethoxyphenyl)-5,6-diethoxy-2,3-dihydro- (9CI) (CA INDEX NAME)

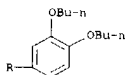
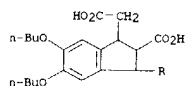


RN 412315-80-1 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-3-(3,4-dipropoxyphenyl)-2,3-dihydro-5,6-dipropoxy- (9CI) (CA INDEX NAME)

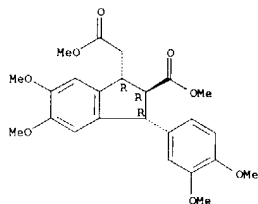
L60 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 412315-82-3 CAPLUS  
CN 1H-Indene-1-acetic acid, 5,6-dibutoxy-2-carboxy-3-(3,4-dibutoxyphenyl)-2,3-dihydro- (9CI) (CA INDEX NAME)



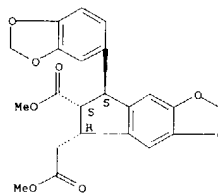
L60 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L60 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:925731 CAPLUS  
DOCUMENT NUMBER: 139:6704  
TITLE: Dimerisations of cinnamates using acidic and acidic/oxidative conditions. [Erratum to document cited in CA136:37435]  
AUTHOR(S): Felter, Andrew; Ward, Robert S.; Venkateswarlu, Reveru; Kamakshi, Chakicherla; Moinuddin, Syed G. A.; Subhash, Pithani V.; Hursthouse, Michael B.; Coles, Simon J.; Light, Mark E.  
CORPORATE SOURCE: Department of Chemistry, University of Wales Swansea, Swansea, SA2 8PP, UK  
SOURCE: Tetrahedron (2002) 58(1), 205  
CODEN: TETRA 155N; 0040-4020  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The corresponding authors should have appeared as Andrew Felter and Reveru Venkateswarlu.  
IT 144878-44-4P 380153-10-6P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and mol. structure (Erratum))  
RN 144878-44-4 CAPLUS  
CN 5H-Indeno[5,6-d]-1,3-dioxole-5-acetic acid, 7-(1,3-benzodioxol-5-yl)-6,7-dihydro-6-(methoxycarbonyl)-, methyl ester, (5R,6S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



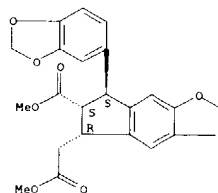
RN 380153-10-6 CAPLUS  
CN 1H-Indene-1-acetic acid, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxycarbonyl)-, methyl ester, (1R,2R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:629482 CAPLUS  
DOCUMENT NUMBER: 136:37435  
TITLE: Dimerisations of cinnamates using acidic and acidic/oxidative conditions  
AUTHOR(S): Felter, A.; Ward, R. S.; Venkateswarlu, R.; Kamakshi, C.; Moinuddin, S. G. A.; Subhash, P. V.; Hursthouse, M. B.; Coles, S. J.; Light, M. E.  
CORPORATE SOURCE: Department of Chemistry, University of Wales Swansea, Swansea, SA2 8PP, UK  
SOURCE: Tetrahedron (2001), 57(36), 7755-7763  
CODEN: TETRA 155N; 0040-4020  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:37435  
AB It is confirmed that the dimerization of Me dialkoxycinnamates in acidic conditions yields trisubstituted indanes. When the reactions are carried out for 1.5 h/0°C in acidic conditions in the presence of DDQ then a variety of lignan types result, two of which represent new classes of lignans.  
IT 144878-44-4P 380153-10-6P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and mol. structure)  
RN 144878-44-4 CAPLUS  
CN 5H-Indeno[5,6-d]-1,3-dioxole-5-acetic acid, 7-(1,3-benzodioxol-5-yl)-6,7-dihydro-6-(methoxycarbonyl)-, methyl ester, (5R,6S,7S)-rel- (9CI) (CA INDEX NAME)

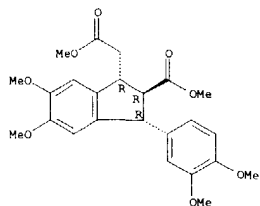
Relative stereochemistry.



RN 380153-10-6 CAPLUS  
CN 1H-Indene-1-acetic acid, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxycarbonyl)-, methyl ester, (1R,2R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~DE~~ ANSWER 10 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:137615 CAPLUS

DOCUMENT NUMBER: 134:280583  
TITLE: Skeletal transformations of perfluoro-1-phenylindan under the action of antimony pentafluoride  
AUTHOR(S): Karpov, V. M.; Mezhenkova, T. V.; Platonov, V. E.; Sinyakov, V. R.  
CORPORATE SOURCE: N.N. Vorozhtsov Institute of Organic Chemistry, Novosibirsk, 630090, Russia  
SOURCE: Journal of Fluorine Chemistry (2001), 107(1), 53-57  
CODEN: JFLCAR; ISSN: 0022-1139  
PUBLISHER: Elsevier Science S.A.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:280583

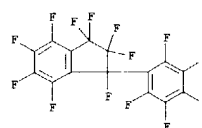
AB Perfluoro-1-phenylindan (I) was obtained from perfluorindan and pentafluorobenzene in the presence of SbF<sub>5</sub>. I heated with antimony pentafluoride at 170°C and then treated with water gave a mixture of perfluorinated 9-methylfluorene (II), 9-hydroxy-9-methylfluorene (III), 9-methyl-1,2,3,4,5,6,7,8-octahydroanthracene, 1,9-dimethyl-5,6,7,8-tetrahydro-8-naphthindan. When heated with SbF<sub>5</sub> in the presence of HF and then treated with water, I is transformed to a mixture of II, III, perfluoro-1,2,3,4,5,6,7,8-octahydroanthracene, perfluoro-10-methyl-9(10H)anthracenone, and 10-H-perfluoro-10-methyl-9(10H)anthracenone.

IT 333800-16-1P 333800-20-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and transformations of perfluoro-1-phenylindan under the action of antimony pentafluoride)

RN 333800-16-1 CAPLUS

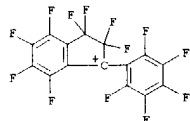
CN 1H-Indene, 1,1,2,2,3,4,5,6,7-nonafuoro-2,3-dihydro-3-(pentafluorophenyl)- (9CI) (CA INDEX NAME)



RN 333800-20-7 CAPLUS

CN 1H-Inden-1-ylum, 2,2,3,3,4,5,6,7-octafluoro-2,3-dihydro-1-(pentafluorophenyl)- (9CI) (CA INDEX NAME)

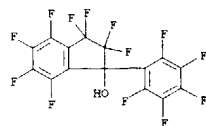
L60 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



IT 333800-18-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and transformations of perfluoro-1-phenylindan under the action of antimony pentafluoride)

RN 333800-18-3 CAPLUS

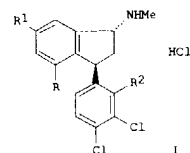
CN 1H-Inden-1-ol, 2,2,3,3,4,5,6,7-octafluoro-2,3-dihydro-1-(pentafluorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~DE~~ ANSWER 11 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:818493 CAPLUS

DOCUMENT NUMBER: 134:115718  
TITLE: Design, Synthesis, and Monoamine Transporter Binding Site Affinities of Methoxy Derivatives of Indatraline  
AUTHOR(S): Gu, Xiao-Hui; Yu, Han; Jacobson, Arthur E.; Rothman, Richard B.; Dersch, Christina M.; George, Clifford; Flippen-Anderson, Judith L.; Rice, Kenner C.  
CORPORATE SOURCE: Laboratory of Medicinal Chemistry, National Institute of Diabetes and Digestive and Kidney Diseases National Institutes of Health, Bethesda, MD, 20892-0815, USA  
SOURCE: Journal of Medicinal Chemistry (2000), 43(25), 4868-4876  
CODEN: JMCMAR; ISSN: 0022-2623  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:115718  
GI

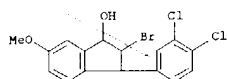


AB A series of methoxy-containing derivs. of indatraline, e.g., I (R = R<sub>2</sub> = H, R<sub>1</sub> = OMe) were synthesized, and their binding affinities for the dopamine, serotonin, and norepinephrine transporter binding sites were determined. Introduction of a methoxy group to indatraline affected its affinity and selectivity greatly. Except for the 4-methoxy derivative I (R = OMe, R<sub>1</sub> = R<sub>2</sub> = H), which had the same high affinity at the dopamine transporter binding site as indatraline, the other methoxy-containing analogs exhibited lower affinity than indatraline for the three transporter binding sites. However, some of the analogs were more selective than indatraline, and the 6-methoxy derivative I (R = R<sub>2</sub> = H, R<sub>1</sub> = OMe) displayed the highest affinity for both the serotonin and norepinephrine transporters. This compound retained reasonable affinity for the dopamine transporter and is a promising template for the development of a long-acting inhibitor of monoamine transporters. Such inhibitors have potential as medications for treatment, as a substitution medication, or for prevention of the abuse of methamphetamine-like stimulants.

IT 321525-38-6P 321525-66-0P 321532-24-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of methoxy derivs. of indatraline and their binding affinities for dopamine, serotonin and norepinephrine transporter binding sites)

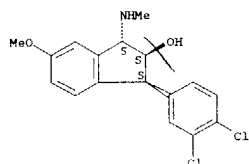
RN 321525-38-6 CAPLUS

L60 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 CN 1H-Inden-1-ol, 2-bromo-3-(3,4-dichlorophenyl)-2,3-dihydro-6-methoxy- (9CI)  
 (CA INDEX NAME)

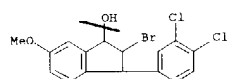


RN 321525-66-0 CAPLUS  
 CN 1H-Inden-2-ol, 1-(3,4-dichlorophenyl)-2,3-dihydro-5-methoxy-3-(methylamino)-, (1R,2R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 321532-24-5 CAPLUS  
 CN 1H-Inden-1-ol, ar,2-dibromo-3-(3,4-dichlorophenyl)-2,3-dihydro-6-methoxy- (9CI) (CA INDEX NAME)



D1-Br

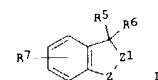
IT 321525-39-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of methoxy derivs. of indatraline and their binding  
 affinities  
 for dopamine, serotonin and norepinephrine transporter binding sites)  
 RN 321525-39-7 CAPLUS  
 CN 1H-Inden-2-ol, 1-(3,4-dichlorophenyl)-2,3-dihydro-5-methoxy-3-(methylamino)-, hydrochloride, (1R,2R,3R)-rel- (9CI) (CA INDEX NAME)

L60 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

REGISTRATION NUMBER: 1999:355727 CAPLUS  
 DOCUMENT NUMBER: 131:18844  
 TITLE: Preparation of 3,3-diphenylindanes and analogs as Ca2+-activated K+ channel inhibitors  
 INVENTOR(S): Brugnara, Carlo; Halperin, Jose; Bellot, Emile M., Jr.; Froimowitz, Mark; Lombardy, Richard John; Clifford, John J.; Gao, Ying-Duo; Haidar, Reem M.; Kelleher, Eugene W.; Khar, Falguni M.; Moussa, Adel M.; Sachdeva, Yesh P.; Sun, Minghua; Taft, Heather N.; Lencar, Wayne I.; Alper, Seth  
 PATENT ASSIGNEE(S): Children's Medical Center Corporation, USA; President and Fellows of Harvard College; Ion Pharmaceuticals, Inc.  
 SOURCE: PCT Int. Appl., 102 pp.  
 CODEN: PIXX02  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

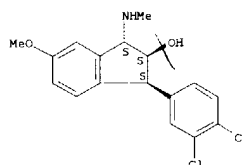
| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| WO 9926624  | A1   | 19990603 | WO 1998-0524968 | 19981120   |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GR, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, BG, BR, CA, CH, CN, CU, CZ, DE, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, BO, CF, CG, CI, CM, GA, GN, GW, HT, HR, NE, SN, TD, TG |      |          |                 |            |
| US 2002004519   | A1   | 20020110 | US 1998-159331  | 19980923   |
| CA 2311129  | AA   | 19990603 | CA 1998-2311129 | 19981120   |
| AU 9915988  | A1   | 19990615 | AU 1999-15988   | 19981120   |
| EP 1032385  | A1   | 20000906 | EP 1998-960381  | 19981120   |
| R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE, PT, IE   |      |          |                 |            |
| JP 2001523717   | T2   | 20011127 | JP 2000-521826  | 19981120   |
| US 2002128256   | A1   | 20020912 | US 2001-880728  | 20010613   |
| PRIORITY APPLN. INFO.:  |      |          | US 1997-975595  | A 19971120 |
|   |      |          | US 1998-159331  | A 19980923 |
|   |      |          | US 1998-159336  | A 19980923 |
|   |      |          | WO 1998-0524968 | W 19981120 |

OTHER SOURCE(S): MARPAT 131:18844  
 GI



AB Title compds. [1: Z = CR1R2 or NR1; Z1 = CR3YR4; R1 = OR, SR, O2CR, etc.; R = H, alkyl, aryl, etc.; R1R2 = O, S, NOR, atoms to complete a heterocyclic ring; R1R3, R2R3 = bond; R4 = H, OH, alkoxy, cyano, (di)alkylamino, etc.; R5, R6 = (un)substituted Ph; R7 = H or 1-4 of halo, alkyl, alkoxy, etc.; Y = bond, alk(en)ylene, alkynylene] were prepared

L60 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 Relative stereochemistry.

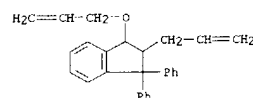


● HCl

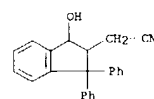
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 Thus, Ph3CHCO2H was cyclized and the product oxidized to give I (R5 = R6 = Ph, R7 = H, Z = C(=NOH), Z1 = CH2). Data for biol. activity of I were given.

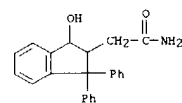
IT 226087-89-4P 226087-95-2P 226087-96-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 3,3-diphenylindanes and analogs as Ca2+-activated K+ channel inhibitors)  
 RN 226087-89-4 CAPLUS  
 CN 1H-Indene, 2,3-dihydro-1,1-diphenyl-2-(2-propenyl)-3-(2-propenyloxy)- (9CI) (CA INDEX NAME)



RN 226087-95-2 CAPLUS  
 CN 1H-Indene-2-acetonitrile, 2,3-dihydro-3-hydroxy-1,1-diphenyl- (9CI) (CA INDEX NAME)

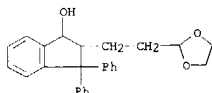


RN 226087-96-3 CAPLUS  
 CN 1H-Indene-2-acetamide, 2,3-dihydro-3-hydroxy-1,1-diphenyl- (9CI) (CA INDEX NAME)



RN 226088-02-4 CAPLUS  
 CN 1H-Inden-1-ol, 2-[2-(1,3-dioxolan-2-yl)ethyl]-2,3-dihydro-3,3-diphenyl- (9CI) (CA INDEX NAME)

L60 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

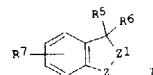


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:355715 CAPLUS  
 DOCUMENT NUMBER: 131:18843  
 TITLE: Preparation of 3,3-diphenylindanes and analogs as Ca<sup>2+</sup>-activated K<sup>+</sup> channel inhibitors  
 INVENTOR(S): Brugnara, Carlos; Halperin, Jose; Fluckiger, Rudolf; Bellotti, Emile M., Jr.; Lombardy, Richard John; Clifford, John J.; Gao, Ying-Duo; Haidar, Reem M.; Kelleher, Eugene W.; Moussa, Adel M.; Sachdeva, Yesh P.; Sun, Minghua; Taft, Heather N.  
 PATENT ASSIGNEE(S): President and Fellows of Harvard College, USA; Children's Medical Center Corporation; Ion Pharmaceuticals, Inc.  
 SOURCE: PCT Int. Appl., 78 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 9926611  | A1   | 19990603 | WO 1998-US24819 | 19981120 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |      |          |                 |          |
| US 6127407  | A    | 20001003 | US 1997-975391  | 19971120 |
| CA 2310750  | AA   | 19990603 | CA 1998-2310750 | 19981120 |
| AU 9924483  | A1   | 19990615 | AU 1999-24483   | 19981120 |
| AU 745639   | B2   | 20020328 |                 |          |
| EP 1047411  | A1   | 20001102 | EP 1998-966732  | 19981120 |
| EP 1047411  | B1   | 20040211 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, GT, UV, FI, RO   |      |          |                 |          |
| BR 9815576  | A    | 20010717 | BR 1998-15576   | 19981120 |
| JP 2001523709   | T2   | 20011127 | JP 2000-521813  | 19981120 |
| US 2002198188   | A1   | 20021226 | US 2002-43640   | 20020110 |
| PRIORITY APPL. INFO.: US 1997-975391 A1 19971120<br>WO 1998-US24819 W 19981120<br>US 2000-554849 B1 20000922  |      |          |                 |          |
| OTHER SOURCE(S): MARPAT 131:18843<br>G1   |      |          |                 |          |



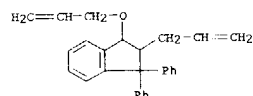
L60 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

AB Title compds. [I: Z = CH<sub>1</sub>R<sub>2</sub> or NR<sub>1</sub>; Z<sub>1</sub> = CR<sub>3</sub>YR<sub>4</sub>; R<sub>1</sub> = OR, SR, O<sub>2</sub>CR, etc.; R = H, alkyl, aryl, etc.; R<sub>1</sub>, R<sub>3</sub> = H; R<sub>1</sub>R<sub>2</sub> = O, S, NOR, atoms to complete a heterocyclic ring; R<sub>1</sub>R<sub>3</sub>, R<sub>2</sub>R<sub>3</sub> = bonds; R<sub>4</sub> = H, OH, alkoxy, cyano, (di)alkylamino, etc.; R<sub>5</sub>, R<sub>6</sub> = (un)substituted Ph; R<sub>7</sub> = H or 1-4 of halo, alkyl, alkoxy, etc.; Y = bond, alk(en)ylene, alkynylene] were prepared. Thus, Ph<sub>3</sub>CH<sub>2</sub>CO<sub>2</sub>H was cyclized and the product oximated to give I [R<sub>5</sub> = R<sub>6</sub> = Ph, R<sub>7</sub> = H, Z = C(=NOH), Z<sub>1</sub> = CH<sub>2</sub>]. Data for biol. activity of I were given.

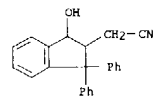
IT 226087-89-4P 226087-95-2P 226087-96-3P  
 226088-02-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 3,3-diphenylindanes and analogs as Ca<sup>2+</sup>-activated K<sup>+</sup> channel inhibitors)

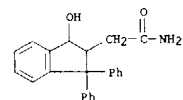
RN 226087-89-4 CAPLUS  
 CN 1H-Indene-2,3-dihydro-1,1-diphenyl-2-(2-propenyl)-3-(2-propenyloxy)-(9CI) (CA INDEX NAME)



RN 226087-95-2 CAPLUS  
 CN 1H-Indene-2-acetonitrile, 2,3-dihydro-3-hydroxy-1,1-diphenyl- (9CI) (CA INDEX NAME)

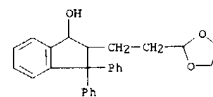


RN 226087-96-3 CAPLUS  
 CN 1H-Indene-2-acetamide, 2,3-dihydro-3-hydroxy-1,1-diphenyl- (9CI) (CA INDEX NAME)



L60 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

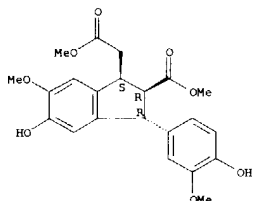
RN 226088-02-4 CAPLUS  
 CN 1H-Indene-1-ol, 2-[2-(1,3-dioxolan-2-yl)ethyl] 2,3-dihydro-3,3-diphenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1998:698798 CAPLUS  
 DOCUMENT NUMBER: 130:119054  
 TITLE: SAR analysis of the Epstein-Barr virus DNA polymerase inhibitors  
 AUTHOR(S): Lin, Mei-Tsu; Liu, Karin C. S. Chen; Kuo, Yueh-Hsiung; Chiu, Jue-Fann; Ren, Shijun; Lien, Eric J.  
 CORPORATE SOURCE: School of Pharmacy, College of Medicine, National Taiwan University, Taipei, Taiwan  
 SOURCE: Chinese Pharmaceutical Journal (Taipei) (1998), 50(1), 13-24  
 CODEN: CPHJEP; ISSN: 1016-1015  
 PUBLISHER: Pharmaceutical Society of Republic of China  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A semiquant. structure-activity relation of forty-nine compds. including lignans, phenols and  $\alpha,\beta$ -unsatd.  $\gamma$ -lactones was analyzed by using a parameter-frame-setting method. Based on the result, a quant. anal. was performed and a statistically significant correlation was obtained between the inhibitory activities (log 1/IC50) of 16 compds. against Epstein-Barr virus DNA polymerase (EBV-DP) and physicochem. parameters (calculated molar refractivity (CMR), calculated partition coefficient in octanol/water (Clog P) and mol. dipole moment ( $\mu$ )). The structural requirements for the optimum activity against EBV-DP of these groups of compds. were identified. These findings provide physicochem. bases for further structural modification and optimization of the lead natural products for antiviral activity.  
 IT 219795-21-8  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (QSAR anal. of Epstein-Barr virus DNA polymerase inhibitors in relation to antiviral activity)  
 RN 219795-21-8 CAPLUS  
 CN 1H-Indene-1-acetic acid, 2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-2-(methoxycarbonyl)-, methyl ester, (1S,2R,3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L60 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1998:118608 CAPLUS  
 DOCUMENT NUMBER: 128:184694  
 TITLE: Endothelin receptor antagonists  
 INVENTOR(S): Elliott, John Duncan; Lago, Maria Amparo  
 PATENT ASSIGNEE(S): Smithkline Beecham Corp., USA  
 SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 336,444.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

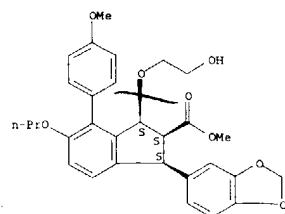
| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| US 5716985 | A    | 19980210 | US 1995-450938  | 19950523 |
| CZ 287406  | B6   | 20001115 | CZ 1994-1109    | 19921029 |
| ZA 9208467 | A    | 19930505 | ZA 1992-8467    | 19921103 |
| ES 2062927 | B1   | 19950701 | ES 1992-2548    | 19921217 |
| ES 2062927 | A1   | 19941216 |                 |          |
| US 5817693 | A    | 19981006 | US 1994-336444  | 19941109 |

PRIORITY APPLN. INFO.:  
 US 1991-787870 B2 19911105  
 US 1992-854195 B2 19920320  
 US 1993-66818 B2 19930427  
 US 1994-336444 A2 19941109  
 CS 1994-1109 A 19921029

OTHER SOURCE(S): MARPAT 128:184694

AB Novel indane and indene derivs. are described which are endothelin receptor antagonists. E.g., (1R,2SR,3RS)-3-[2-(2-hydroxy-1-ethoxy)-4-methoxyphenyl]-1-(3,4-methylenedioxyphenyl)-5-(1-propoxy)indan-2-carboxylic acid was prepared. A inhalant formulation was given.  
 IT 203396-18-3P 203396-19-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (indane derivs. as endothelin receptor antagonists)  
 RN 203396-18-3 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(2-hydroxyethoxy)-4-(4-methoxyphenyl)-5-propoxy-, methyl ester, [1S-(1a,2a,3a)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

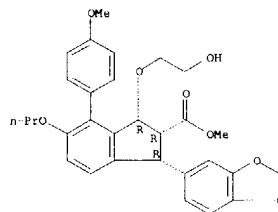


RN 203396-19-4 CAPLUS

L60 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 REFERENCE COUNT: 8  
 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 CN 1H-Indene-2-carboxylic acid, 1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(2-hydroxyethoxy)-4-(4-methoxyphenyl)-5-propoxy-, methyl ester, [1R-(1a,2a,3a)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



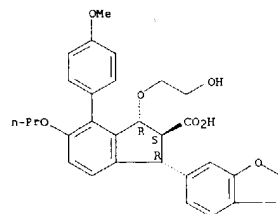
IT 203396-14-9P 203396-15-0P 203396-20-7P  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (indane derivs. as endothelin receptor antagonists)  
 RN 203396-14-9 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(2-hydroxyethoxy)-4-(4-methoxyphenyl)-5-propoxy-, (1a,2B,3a)-, compd. with N-cyclohexylcyclohexanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 203396-13-8

CMF C29 H30 O8

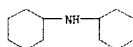
Relative stereochemistry.



CM 2

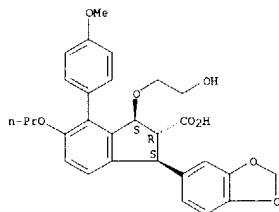


L60 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 CRN 101-83-7  
 CMF C12 H23 N



RN 203396-15-0 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(2-hydroxyethoxy)-4-(4-methoxyphenyl)-5-propoxy-, [1S-(1a,2b,3a)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



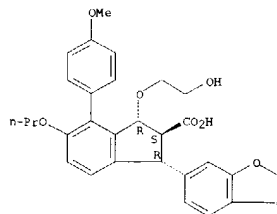
RN 203396-20-7 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(2-hydroxyethoxy)-4-(4-methoxyphenyl)-5-propoxy-, (1a,2b,3a)-, compd. with acetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 203396-13-8  
 CMF C29 H30 O8

Relative stereochemistry.

L60 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

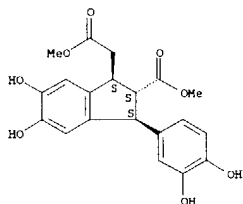
CRN 64-19-7  
 CMF C2 H4 O2



L60 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:341754 CAPLUS  
 DOCUMENT NUMBER: 127:47693  
 TITLE: Isolation and synthesis of new antioxidants from sunflower seeds  
 AUTHOR(S): Kato, Tadashi; Takahashi, Wataru; Suzuki, Yoshiaki  
 CORPORATE SOURCE: Fac. Sci., Sci. Univ. Tokyo, Tokyo, 162, Japan  
 SOURCE: Natural Product Letters (1997), 9(3), 161-165  
 CODEN: NPLEEF; ISSN: 1057-5634  
 PUBLISHER: Harwood  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Structure elucidation and synthesis of 2 arylindane-type phenolic antioxidants from sunflower seeds is reported. The structures were determined by extensive spectroscopic anal., and finally were confirmed by comparison of their spectral data with those of authentic samples prepared by dimerization of 3,4-dihydroxycinnamate with CF3CO2H.  
 IT 191280-19-0P 191280-20-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (isolation, synthesis, and structure of antioxidative (hydroxyphenyl)indanes from sunflower seeds)  
 RN 191280-19-0 CAPLUS  
 CN 1H-Indene-1-acetic acid, 3-(3,4-dihydroxyphenyl)-2,3-dihydro-5,6-dihydroxy-2-(methoxycarbonyl)-, methyl ester, (1a,2a,3b)-(+)- (9CI) (CA INDEX NAME)

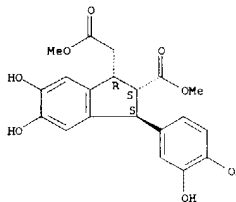
Rotation (+). Absolute stereochemistry unknown.  
 Currently available stereo shown.



RN 191280-20-3 CAPLUS  
 CN 1H-Indene-1-acetic acid, 3-(3,4-dihydroxyphenyl)-2,3-dihydro-5,6-dihydroxy-2-(methoxycarbonyl)-, methyl ester, (1a,2a,3b)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.  
 Currently available stereo shown.

L60 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L60 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:291029 CAPLUS

DOCUMENT NUMBER: 126:274754

TITLE: The Secalosides, Novel Tumor Cell Growth Inhibitory Glycosides from a Pollen Extract

AUTHOR(S): Jaton, Jean-Claude; Roulin, Karen; Rose, Keith;

Sirotnak, Francis M.; Lewenstein, Ari; Brunner, Gerard; Fankhauser, Catherine P.; Burger, Ulrich

CORPORATE SOURCE: Department of Medical Biochemistry, University of

Geneva, Geneva, CH-1211, Switz.

SOURCE: Journal of Natural Products (1997), 60(4), 356-360

CODEN: JNPRDF; ISSN: 0163-3864

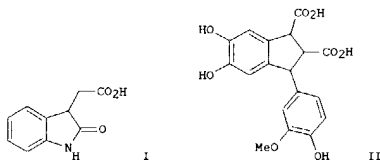
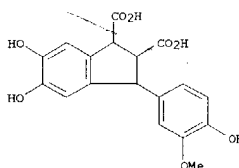
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

L60 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



AB The pollen of rye (*Secale cereale*) is shown to contain a biol. highly active family of glycosides called the secalosides. Secalosides A and B, both of mol. formula C<sub>46</sub>H<sub>51</sub>NO<sub>24</sub>, were found to be epimeric esters of (2-oxo-3-indolyl)acetic acid (I). They are made up, in addition to this heterocyclic aglycon I (I), of three hexose building blocks and a carbocyclic aglycon II, which is an indan-derived dicarboxylic acid (II). In aqueous solution, secalosides A and B interchanged by epimerization at the chiral center of I. A further epimeric pair, secalosides C and D, contain one addnl. glucose building block, were also isolated. Secalosides A and B, I, and 2-oxo-1,2,3,4-tetrahydroquinoline-4-carboxylic acid, which results from I by hydrolytic rearrangement, exhibited significant antitumor activity against S180 sarcoma in vivo. IC<sub>50</sub> values obtained were about 5 µg/mouse for the secalosides and 1 µg/mouse for 3 and 4.

IT 188788-47-8

RL: PRP (Properties)

(secaloside aglycon)

RN 188788-47-8 CAPLUS

CN 1H-Indene-1,2-dicarboxylic acid, 2,3-dihydro-5,6-dihydroxy-3-(4-hydroxy-3-methoxyphenyl)- (9CI) (CA INDEX NAME)

Currently available stereo shown.

L60 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L60 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:220522 CAPLUS

DOCUMENT NUMBER: 126:207507

TITLE: New glycosides from pollen and their sugar-free degradation products and derivatives

INVENTOR(S): Jaton, Jean-Claude; Marazza, Fabrizio; Lewenstein, Ari; Sirotnak, Francis M.; Jaun, Bernhard

PATENT ASSIGNER(S): Cerbios-Pharma S.A., Switz.

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| EP 757055   | A2   | 19970205 | EP 1996-110132  | 19960623 |
| EP 757055   | A3   | 19980422 |                 |          |
| EP 757055   | B1   | 19991027 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE |      |          |                 |          |
| AT 186054   | E    | 19991115 | AT 1996-110132  | 19960623 |
| US 5712377  | A    | 19980127 | US 1996-672651  | 19960628 |
| JP 09104693                                       | A2   | 19970422 | JP 1996-171464  | 19960701 |
| PRIORITY APPL. INFO.: CH 1995-1930 19950630       |      |          |                 |          |

AB Complex glycosides were isolated from pollen (especially rye pollen) by dialysis, gel filtration, and HPLC, and the structures of some of these and of their hydrolytically produced aglycons were determined. Some of the aglycons possessed the structure of indandicarboxylic acids. Some of the glycosides possessed antitumor activity in mice but not against tumor cell cultures in vitro, indicating that the in vivo activity could be attributed to an immunomodulating action and not to a direct cytotoxic effect of the compds. An antiviral action of the compds. is also claimed.

IT 187988-53-09

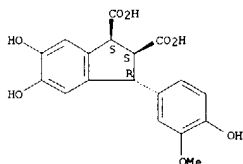
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(purification and antitumor and immunomodulator activity of glycosides and aglycons from pollen)

RN 187988-53-0 CAPLUS

CN 1H-Indene-1,2-dicarboxylic acid, 2,3-dihydro-5,6-dihydroxy-3-(4-hydroxy-3-methoxyphenyl)-, [1S-(1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



~~160~~ ANSWER 19 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:509814 CAPLUS  
 DOCUMENT NUMBER: 125:167593  
 TITLE: Indanecarboxamide derivatives useful as NK3 receptor antagonists  
 INVENTOR(S): Girard, Gerald R.; Weinstock, Joseph  
 PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA  
 SOURCE: PCT Int. Appl., 21 pp.  
 CODEN: PIXX02  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 9620193   | A1   | 19960704 | WO 1995-US13058 | 19951013 |
| W: JP, US  |      |          |                 |          |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |      |          |                 |          |
| EP 799225  | A1   | 19971008 | EP 1995-938210  | 19951013 |
| R: BE, CH, DE, DK, FR, GB, IT, LI, NL                              |      |          |                 |          |
| JP 10512855  | T2   | 19981208 | JP 1995-520428  | 19951013 |
| PRIORITY APPLN. INFO.: US 1994-363501 19941223                     |      |          |                 |          |
| WO 1995-US13058 19951013   |      |          |                 |          |
| OTHER SOURCE(S): MARPAT 125:167593                                 |      |          |                 |          |
| GI   |      |          |                 |          |

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to indane amide derivs. 1, processes for their preparation, and their use in treating NK3-mediated disease states [wherein R1-R5 = H, alk(en)yl, haloalkyl, alkoxy, halo, OH, (un)substituted aryl, cycloalk(en)yl, CO2H, etc.; or R2R3 and/or R4R5 = O(CH2)R6 (r=1-3), or form 5-, 6-, or 7-membered ring; a = 1-3; R6, R7 = H, (un)substituted acetyl, arylsulfonyl, (hetero)aryl, alkyl, alkenyl, NR4R5, etc.; R8, R9 = as given for R6; or R6R7 or R8R9 form 5-, 6-, or 7-membered ring; m = 0-3; provided that R6 and R7 are not each H when m = 0]. Twenty-six specific examples of I are given. For instance, (+)-(1a,2b,3a)-1-(4-methoxyphenyl)-3-(3,4-methylenedioxyphenyl)indane-2-carboxylic acid was converted to the acid chloride with SOCl2, followed by amidation of the chloride with aqueous MeNH2 in Et2O, to give 72% title compound II. In assays for inhibition of binding of radiolabeled NK3 ligands such as [3H]-senktide to guinea pig and human NK3 receptors in vitro, the most potent examples of I (not specified) had IC50 values in the range of 10  $\mu$ M. NK3 antagonist activity was demonstrated by inhibition of senktide-induced contraction of guinea pig ileum in vitro.

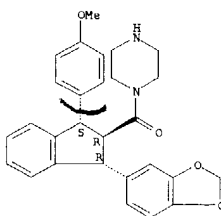
IT 180057-91-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of indanecarboxamide derivs. as NK3 receptor antagonists)

RN 180057-91-4 CAPLUS

CN Piperazine, 1-[[[(1R,2R,3S)-1-(1,3-benzodioxol-5-yl)-2,3-dihydro-3-(4-

160 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 methoxyphenyl)-1H-inden-2-yl]carbonyl]-, tel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



~~160~~ ANSWER 20 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:469599 CAPLUS  
 DOCUMENT NUMBER: 125:143367  
 TITLE: Stopped-Flow Investigation of Trifluoromethanesulfonic Acid Initiated Cationic Oligomerization of trans-1,3-Diphenyl-1-butene. I. Analysis of products and UV-Visible Spectroscopic Study  
 AUTHOR(S): Charleux, Bernadette; Rives, Alain; Vairon, Jean-Pierre; Matyjaszewski, Krzysztof  
 CORPORATE SOURCE: Laboratoire de Chimie Macromoléculaire, Université Pierre et Marie Curie, Paris, 75252, Fr.  
 SOURCE: Macromolecules (1996), 29(18), 5777-5783  
 CODEN: MAMOBK; ISSN: 0024-9297  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

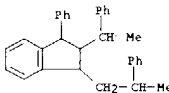
AB Cationic oligomerization of the trans ethylenic dimer of styrene, 1,3-diphenyl-1-butene (D), initiated with triflic acid was investigated using the high-purity stopped-flow technique coupled with UV-visible spectroscopy. The dimer was protonated to the distyryl cation, 1,3-diphenyl-1-butylium (D+), which absorbs at 340 nm, as expected from styrene polymerization results. This species appeared quickly and reached its maximum within approx. 1 s at below -64° and then decreased slowly during approx. 1 min. The higher the temperature, the lower the intensity of this peak and the shorter the time to reach its maximum. The D+ either cyclizes to 1-methyl-3-phenylindan or reacts with D to produce oligomers, and these two reactions lead to a complete consumption of the double bond as evidenced by a decrease of the 296 nm optical d. The main final products of the reaction were always indan styrene tetramers (dimers of 1,3-diphenyl-1-butene) and the proportion of 1-methyl-3-phenylindan was higher when the temperature was increased. No styrene trimers or pentamers were detected although they are formed at temps. >50°. Two other absorptions appearing immediately after mixing and increasing more slowly than the 340 nm peak were observed at 349 and 505 nm; they reached a very stable plateau below -30°, but at higher temps., they passed through a maximum and were replaced by two other peaks at 316 and 415 nm. The 349 and 505 nm peaks were attributed to the same cationic species, plausibly an allylic cation, 1,3-diphenyl-1-buten-3-ylum, produced by hydride abstraction from trans-1,3-diphenyl-1-butene. At above -30°, the absorptions at 316 and 415 nm were assigned to indanylium cations resulting from different cyclic species produced during the course of the reaction. The process described above can be considered as a model system for the behavior of the unsatd. chain ends in the cationic polymerization of styrene.

IT 180140-69-6P, 1-Phenyl-2-(1-phenylethyl)-3-(2-phenylpropyl)indan  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation by cationic oligomerization of styrene dimer as model for styrene polymerization)

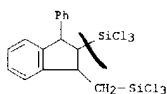
RN 180140-69-6 CAPLUS

CN 1H-Indene, 2,3-dihydro-1-phenyl-2-(1-phenylethyl)-3-(2-phenylpropyl)- (9CI) (CA INDEX NAME)

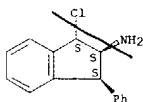
160 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



**L60** ANSWER 21 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 AB: ANSWER 21 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:69733 CAPLUS  
 DOCUMENT NUMBER: 124:203194  
 TITLE:  $\beta$ -Trichlorosilylstyrene oligomers  
 AUTHOR(S): Brook, Michael A.; Sebastian, Thomas; Huelser, Peter; Jueschke, Ralf; Wenzel, Stefan; Townsend, Jennifer A.; Falletta, Patricia R.  
 CORPORATE SOURCE: Dep. Chem., McMaster Univ., Hamilton, ON, L8S 4M1, Can.  
 SOURCE: Canadian Journal of Chemistry (1995), 73(11), 1794-802  
 CODEN: CJCHAG; ISSN: 0008-4042  
 PUBLISHER: National Research Council of Canada  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Under cationic conditions using triflic acid as the initiator, it is possible to oligomerize  $\beta$ -trichlorosilylstyrene to low-mol.-weight oligomers with a maximum d.p. of .apprx.9. Termination of the process occurs by an intramol. Friedel-Crafts reaction, leading to highly functionalized, indane-terminated oligomers. At lower temps., the reaction is diastereoselective. The oligomerization process was shown to require electron-withdrawing groups on Si; the replacement of Cl spectator ligands with alkoxy or alkyl groups led to protodesilylation. The mechanisms for formation of the indane-terminated oligomers is discussed.  
 IT 121987-99-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (oligomerization of trichlorosilylstyrene in presence of triflic acid catalysts)  
 RN 121987-99-3 CAPLUS  
 CN Silane, trichloro[[2,3-dihydro-3-phenyl-2-(trichlorosilyl)-1H-inden-1-yl)methyl]- (9CI) (CA INDEX NAME)



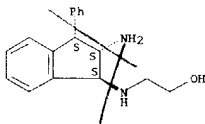
**L60** ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



● HCl

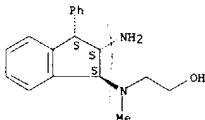
RN 173279-22-6 CAPLUS  
 CN Ethanol, 2-[(2-amino-2,3-dihydro-3-phenyl-1H-inden-1-yl)amino]-, [1S-(1 $\alpha$ ,2 $\beta$ ,3 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 173279-23-7 CAPLUS  
 CN Ethanol, 2-[(2-amino-2,3-dihydro-3-phenyl-1H-inden-1-yl)methylamino]-, [1S-(1 $\alpha$ ,2 $\beta$ ,3 $\beta$ )]- (9CI) (CA INDEX NAME)

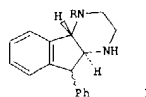
Absolute stereochemistry.



RN 173395-92-1 CAPLUS  
 CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl-, [1S-(1 $\alpha$ ,2 $\beta$ ,3 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

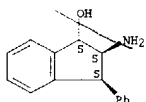
**L60** ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 AB: ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1995:942739 CAPLUS  
 DOCUMENT NUMBER: 124:176009  
 TITLE: Potential antidepressants. Synthesis and stereochemistry of hexahydro-9-phenyl-1H-indeno[1,2-b]pyrazines  
 AUTHOR(S): Chahboun, S.; Gelbocke, M.; Smith, D. F.  
 CORPORATE SOURCE: Lab. Chim. Pharm. Org., Univ. Libre Bruxelles, Brussels, B-1050, Belg.  
 SOURCE: Bulletin des Societes Chimiques Belges (1995), 104(10), 613-22  
 CODEN: BSCBAG; ISSN: 0037-9646  
 PUBLISHER: Societe Chimique Belges  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 GI



AB The synthesis of diastereoisomeric 1H-indeno[1,2-b]pyrazines (1, R = H, Me) is described, using as a key step for piperazine ring formation an alkoxyphosphonium salt.  
 IT 173279-21-5P 173279-22-6P 173279-23-7P  
 173395-92-1P 173395-93-2P 173395-94-3P  
 173395-95-4P 173395-96-5P 173395-97-6P  
 173395-98-7P 173395-99-8P 173396-00-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis and stereochem. of hexahydro-9-phenyl-1H-indeno[1,2-b]pyrazines)  
 RN 173279-21-5 CAPLUS  
 CN 1H-Inden-2-amine, 1-chloro-2,3-dihydro-3-phenyl-, hydrochloride, [1S-(1 $\alpha$ ,2 $\beta$ ,3 $\beta$ )]- (9CI) (CA INDEX NAME)

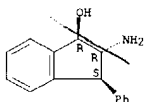
Absolute stereochemistry.

**L60** ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



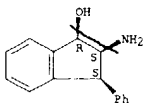
RN 173395-93-2 CAPLUS  
 CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl-, [1R-(1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



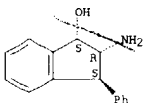
RN 173395-94-3 CAPLUS  
 CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl-, [1R-(1 $\alpha$ ,2 $\alpha$ ,3 $\alpha$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



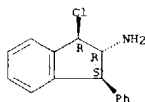
RN 173395-95-4 CAPLUS  
 CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl-, [1S-(1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 173395-96-5 CAPLUS  
 CN 1H-Inden-2-amine, 1-chloro-2,3-dihydro-3-phenyl-, hydrochloride, [1R-(1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )]- (9CI) (CA INDEX NAME)

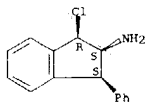
L60 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
Absolute stereochemistry.



● HCl

RN 173395-97-6 CAPLUS  
CN 1H-Inden-2-amine, 1-chloro-2,3-dihydro-3-phenyl-, hydrochloride, [1R-(1α,2α,3α)]- (9CI) (CA INDEX NAME)

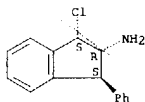
Absolute stereochemistry.



● HCl

RN 173395-98-7 CAPLUS  
CN 1H-Inden-2-amine, 1-chloro-2,3-dihydro-3-phenyl-, hydrochloride, [1S-(1α,2α,3β)]- (9CI) (CA INDEX NAME)

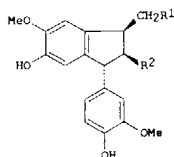
Absolute stereochemistry.



● HCl

RN 173395-99-8 CAPLUS  
CN Ethanol, 2-[(2-amino-2,3-dihydro-3-phenyl-1H-inden-1-yl)amino]-, [1R-(1α,2α,3α)]- (9CI) (CA INDEX NAME)

L60 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1995:834144 CAPLUS  
DOCUMENT NUMBER: 124:55651  
TITLE: Studies on acidic dimerization of 3,4-dioxygenated cinnamate or 1-phenylpropene to arylindane lignans  
AUTHOR(S): Kuo, Yueh-Hsiung; Wu, Chien-Huang; Wu, Rong-En; Lin, Sheng-Tsai  
CORPORATE SOURCE: Dep. Chem., Natl. Taiwan Univ., Taipei, Taiwan  
SOURCE: Chemical & Pharmaceutical Bulletin (1995), 43(8), 1267-71  
CODEN: CPBTAL; ISSN: 0009-2363  
PUBLISHER: Pharmaceutical Society of Japan  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 124:55651  
GI



AB The TsOH-catalyzed dimerization of (E)-ferulic acid gave the arylindane lignans I [R1 = H, CO2H, CO2Me, R2 = CO2Me; R1 = CO2Me, R2 = CO2H]. The HCO2H-catalyzed dimerization of (E)-ferulate similarly gave I [R1 = H, CO2Me, R2 = CO2Me]. These I were converted to some other derivs. The structures of the products were elucidated and a mechanism is proposed for the reactions.

IT 144878-41-1P 144878-42-2P 144878-47-7P  
172092-18-1P 172092-19-2P 172092-21-6P  
172092-22-7P 172092-25-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(dimerization of ferulate to arylindane lignans)

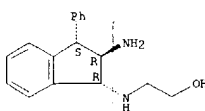
RN 144878-41-1 CAPLUS

CN 1H-Indene-1-acetic acid, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxycarbonyl)-, methyl ester, (1α,2α,3β)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
[1R-(1α,2β,3α)]- (9CI) (CA INDEX NAME)

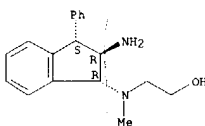
Absolute stereochemistry.



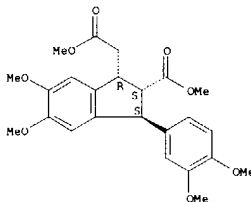
RN 173396-00-4 CAPLUS

CN Ethanol, 2-[(2-amino-2,3-dihydro-3-phenyl-1H-inden-1-yl)methylamino]-, [1R-(1α,2β,3α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



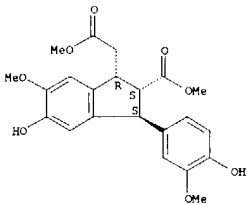
L60 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 144878-42-2 CAPLUS

CN 1H-Indene-1-acetic acid, 2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-2-(methoxycarbonyl)-, methyl ester, (1α,2α,3β)- (9CI) (CA INDEX NAME)

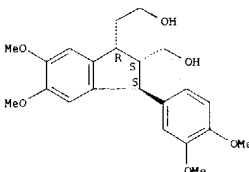
Relative stereochemistry.



RN 144878-47-7 CAPLUS

CN 1H-Indene-1-ethanol, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-2-(hydroxymethyl)-5,6-dimethoxy-, (1α,2α,3β)- (9CI) (CA INDEX NAME)

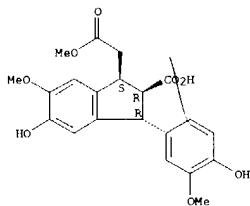
Relative stereochemistry.



L60 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

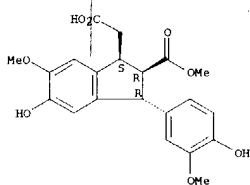
RN 172092-18-1 CAPLUS  
 CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-,  $\alpha$ -methyl ester, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 172092-19-2 CAPLUS  
 CN 1H-Indene-1-acetic acid, 2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-2-(methoxycarbonyl)-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

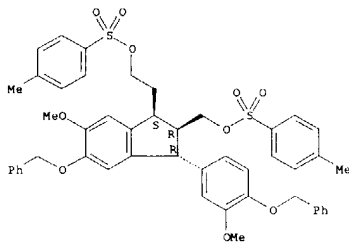
Relative stereochemistry.



RN 172092-21-6 CAPLUS  
 CN 1H-Indene-1-acetic acid, 2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-3-[3-methoxy-4-(phenylmethoxy)phenyl]-5-(phenylmethoxy)-, methyl ester, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



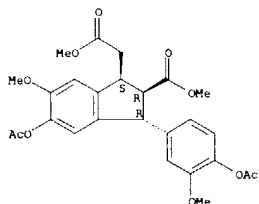
IT 172092-20-5P 172092-23-8P 172092-24-9P

172092-27-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (dimerization of ferulate to arylindan lignans)

RN 172092-20-5 CAPLUS

CN 1H-Indene-1-acetic acid, 5-(acetyloxy)-3-[4-(acetyloxy)-3-methoxyphenyl]-2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-, methyl ester, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

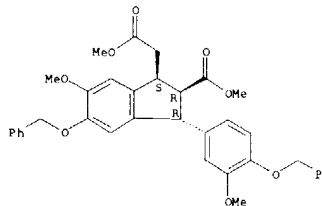


RN 172092-23-8 CAPLUS

CN 1H-Indene, 1-(2-chloroethyl)-2-(chloromethyl)-2,3-dihydro-6-methoxy-3-[3-methoxy-4-(phenylmethoxy)phenyl]-5-(phenylmethoxy)-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

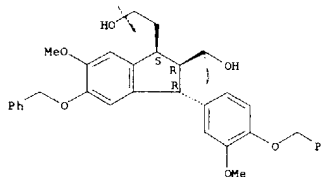
L60 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 172092-22-7 CAPLUS

CN 1H-Indene-1-ethanol, 2,3-dihydro-2-(hydroxymethyl)-6-methoxy-3-(3-methoxy-4-(phenylmethoxy)phenyl)-5-(phenylmethoxy)-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

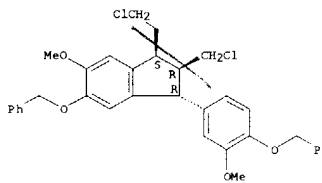


RN 172092-25-0 CAPLUS

CN 1H-Indene-1-ethanol, 2,3-dihydro-6-methoxy-3-[3-methoxy-4-(phenylmethoxy)phenyl]-2-[[[(4-methylphenyl)sulfonyl]oxy]methyl]-5-(phenylmethoxy)-, 4-methylbenzenesulfonate, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

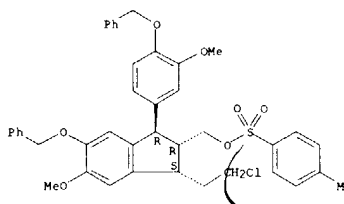
L60 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 172092-24-9 CAPLUS

CN 1H-Indene-2-methanol, 3-(2-chloroethyl)-2,3-dihydro-5-methoxy-1-[3-methoxy-4-(phenylmethoxy)phenyl]-6-(phenylmethoxy)-, 4-methylbenzenesulfonate, (1 $\alpha$ ,2 $\beta$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

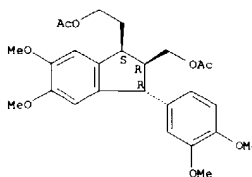
Relative stereochemistry.



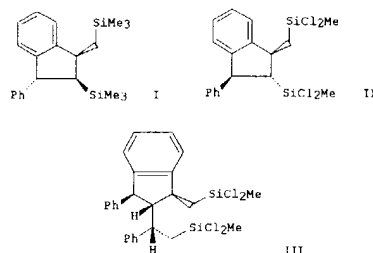
RN 172092-27-2 CAPLUS

CN 1H-Indene-1-ethanol, 2-[(acetyloxy)methyl]-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-, acetate, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.



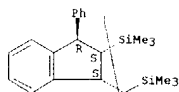
ACCESSION NUMBER: 1995:819663 CAPLUS  
 DOCUMENT NUMBER: 124:56024  
 TITLE: Electrophilic additions to styrylsilanes: the effect of changing the ligands on silicon  
 AUTHOR(S): Brook, Michael A.; Henry, Courtney; Jefferson, Elizabeth; Juschke, Ralf; Sebastian, Thomas; Tomaszewski, Mirek; Wenzel, Stefan  
 CORPORATE SOURCE: Dep. chem., McMaster Univ., Hamilton, ON, L8S 4M1, Can.  
 SOURCE: Bulletin de la Societe Chimique de France (1995), 132(5-6), 559-68  
 CODEN: BSCFAS; ISSN: 0037-8968  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 124:56024  
 GI



AB Styrylsilanes readily undergo addition of C electrophiles and protons. The products of the reaction depend upon the nonparticipating substituents on Si. Thus, while (E)- $\beta$ -(trimethylsilyl)styrene 4 readily reacts with electrophiles, e.g.,  $\text{CH}_3\text{COCl}$ , the reaction products did not contain Si or new C-C bonds, e.g.,  $\text{PhCH}(\text{CH}_3)\text{CO}_2\text{Me}$  (72); even in the presence of acyl-substituted C electrophiles, e.g.,  $\text{PhCH}_2\text{COCl}$ , the favored reaction was protodesilylation to give 4-phenyl-3,4-dihydronaphthalen-2-one (52). (E)- $\beta$ -(trichlorosilyl)styrene 2 did not participate in the reaction with C electrophiles or reasonably strong protic acids. However, with triflic acid, 2 cleanly and diastereoselectively dimerized producing after methylation, [(trimethylsilyl)methyl]dihydroindene I, as shown by an x-ray crystal structure anal. The simple change of a Me for a chloro group in the starting material, i.e.,  $\text{PhCH}(\text{CH}_3)\text{SiCl}_2\text{Me}$ , under the same reaction conditions produced a different dihydroindene diastereomer II along with a trimer III. The reasons for the changes in the reaction mechanism are

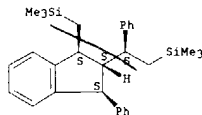
IT 132514-90-0P 171598-44-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (crystal structure)  
 RN 132514-90-0 CAPLUS  
 CN Silane, [(2,3-dihydro-3-phenyl-2-(trimethylsilyl)-1H-inden-1-yl)methyl]trimethyl-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



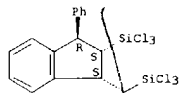
RN 171598-44-0 CAPLUS  
 CN Silane, [(2,3-dihydro-3-phenyl-2-[(1-phenyl-2-(trimethylsilyl)ethyl]-1H-inden-1-yl)methyl]trimethyl-, (1 $\alpha$ ,2 $\beta$ (R\*),3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



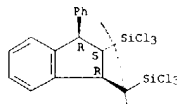
IT 132617-40-4P 132617-41-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and attempted equilibration of isomers of)  
 RN 132617-40-4 CAPLUS  
 CN Silane, trichloro[(2,3-dihydro-3-phenyl-2-(trichlorosilyl)-1H-inden-1-yl)methyl]-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



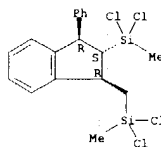
RN 132617-41-5 CAPLUS  
 CN Silane, trichloro[(2,3-dihydro-3-phenyl-2-(trichlorosilyl)-1H-inden-1-yl)methyl]-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



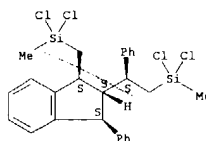
IT 132514-91-1P 171598-43-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and methylation of)  
 RN 132514-91-1 CAPLUS  
 CN Silane, dichloro[(2-(dichloromethylsilyl)-2,3-dihydro-3-phenyl-1H-inden-1-yl)methyl]methyl-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 171598-43-9 CAPLUS  
 CN Silane, dichloro[2-[1-[(dichloromethylsilyl)methyl]-2,3-dihydro-3-phenyl-1H-inden-2-yl]-2-phenylethyl]methyl-, (1 $\alpha$ ,2 $\beta$ (R\*),3 $\alpha$ )- (9CI) (CA INDEX NAME)

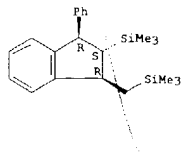
Relative stereochemistry.



IT 132617-42-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 132617-42-6 CAPLUS  
 CN Silane, [(2,3-dihydro-3-phenyl-2-(trimethylsilyl)-1H-inden-1-yl)methyl]trimethyl-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



~~L60~~ ANSWER 25 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1994:654929 CAPLUS  
 DOCUMENT NUMBER: 121:254929

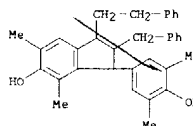
TITLE: Formation of Carbon-Carbon Bonds via Quinone Methide-Initiated Cyclization Reactions  
 AUTHOR(S): Angle, Steven R.; Arnaiz, Damian O.; Boyce, James P.; Frutos, Rogelio P.; Louie, Michael S.; Mattson-Arnaiz, Heather L.; Rainier, Jon D.; Turnbull, Kenneth D.; Yang, Wenjin  
 CORPORATE SOURCE: Department of Chemistry, University of California, Riverside, CA, 92521-0403, USA  
 SOURCE: Journal of Organic Chemistry (1994), 59(21), 6322-37  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 121:254929

AB P-Quinone methides are excellent electrophilic cyclization initiators for the formation of six-membered rings. Cyclizations to form five- and seven-membered rings were also studied. Oxidation of 2,6-disubstituted phenols with Ag<sub>2</sub>O afforded the corresponding quinone methides. A wide range of cyclization terminators/nucleophiles are effective in the cyclizations, including allylsilane, β-keto esters, furan, pyrrole, indole, and a number of alkenes. The yields of the cyclizations were generally high.

IT 150555-68-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 150555-68-1 CAPLUS

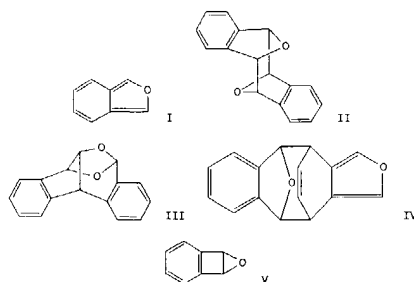
CN 1H-inden-5-ol, 2,3-dihydro-3-(4-hydroxy-3,5-dimethylphenyl)-4,6-dimethyl-1-(2-phenylethyl)-2-(phenylethyl)- (9CI) (CA INDEX NAME)



~~L60~~ ANSWER 26 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1994:244743 CAPLUS  
 DOCUMENT NUMBER: 120:244743

TITLE: The photochemistry of isobenzofuran. I. Structure of the dimers resulting from ultraviolet irradiation of isobenzofuran in acetone and ether solution  
 AUTHOR(S): Wacrenier, Ronald N.; Pitt, Ian G.; Russell, Richard A.  
 CORPORATE SOURCE: Cent. Mol. Archit., Univ. Cent. Queensland, Rockhampton, 4702, Australia  
 SOURCE: Australian Journal of Chemistry (1993), 46(10), 1515-34  
 CODEN: AJCHAS; ISSN: 0004-9425

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GT



AB Irradiation of isobenzofuran (I) in acetone solution yields a sym. [8+8] dimer II involving bonding at the peri-position of the furan moiety in each mol. The anti-stereochem. of this dimer was established by a novel application of lanthanide induced shift spectroscopy. In contrast, irradiation of I in ether solution yielded the unsym.

dimer III as the major product, together with lesser amts. of the sym. dimer II, and small amts. of a new dimer IV resulting from [8+8] cycloaddn., where the 8x system of the isobenzofuran of one mol. reacts with the carbocyclic 4x diene of the other. The structure of the unsym. dimer III was confirmed by synthesis. No evidence for the Dewar form V of isobenzofuran could be obtained in these reactions conducted at -60° and monitored by 1H-NMR spectroscopy. However, the small, but persistent, production of o-phthalaldehyde may implicate an intermediate derived from V.

IT 84657-76-1P 84710-53-2P

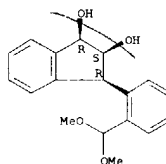
RL: SPN (Synthetic preparation); PREP (Preparation) (intermediate in preparation of isobenzofuran dimer)

RN 84657-76-1 CAPLUS

CN 1H-Indene-1,2-diol, 3-[2-(dimethoxymethyl)phenyl]-2,3-dihydro-,

L60 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 (1a,2a,3a)- (9CI) (CA INDEX NAME)

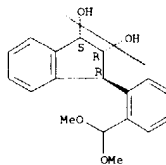
Relative stereochemistry.



RN 84710-53-2 CAPLUS

CN 1H-Indene-1,2-diol, 3-[2-(dimethoxymethyl)phenyl]-2,3-dihydro-, (1a,2a,3a)- (9CI) (CA INDEX NAME)

Relative stereochemistry.





L60 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:233604 CAPLUS

DOCUMENT NUMBER: 118:233604

TITLE: Dopamine receptor agonists. I. Synthesis and pharmacological evaluation of 4-aryl-substituted analogs of 6,7-dihydroxy-2-aminotetralin (6,7-ADTN) and related indane compounds

AUTHOR(S): Bertolini, G.; Vecchiarelli, V.; Mabilis, M.; Norcini, G.; Restelli, A.; Santangelo, F.; Villa, A. M.; Casagrande, C.

CORPORATE SOURCE: Med. Chem. Dep., Zambon Res., Bresso, 20091, Italy

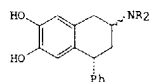
SOURCE: European Journal of Medicinal Chemistry (1992), 27(7), 663-72

CODEN: EJMCA5; ISSN: 0223-5234

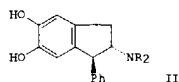
DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I



II

AB Derivs. of cis- and trans-4-phenyl-6,7-dihydroxy-2-aminotetraline I (R = H, Me, Pr) and trans-1-phenyl-5,6-dihydroxy-2-aminoindane II (R = H), Me, Pr) were synthesized as fenoldopam analogs. They showed no affinity for D1 and D2 binding sites in rat striatal membranes. Mol. modeling and NMR methods used in structural comparison with fenoldopam are discussed.

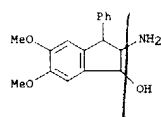
IT 146656-00-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

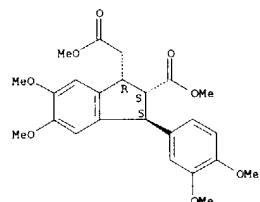
(preparation and dehydroxylation of)

RN 146656-00-0 CAPLUS

CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-5,6-dimethoxy-3-phenyl- (9CI) (CA INDEX NAME)



L60 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



IT 128440-94-8P 144878-42-2P 144878-43-3P

144878-44-4P 144878-45-5P 144878-46-6P

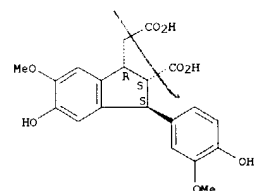
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 128440-94-8 CAPLUS

CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-5-hydroxy-3-(4-hydroxy 3-methoxyphenyl)-6-methoxy-, (1a,2a,3b)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 144878-42-2 CAPLUS

CN 1H-Indene-1-acetic acid, 2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-2-(methoxycarbonyl)-, methyl ester, (1a,2a,3b)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:22000 CAPLUS

DOCUMENT NUMBER: 118:22000

TITLE: Dimerization of 3,4-disubstituted cinnamic acids and esters

AUTHOR(S): Al-Farhan, Emile; Keehn, Philip M.; Stevenson, Robert

CORPORATE SOURCE: Dep. Chem., Brandeis Univ., Waltham, MA, 02254, USA

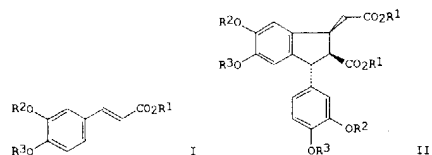
SOURCE: Synthesis (1992), (10), 959-61

CODEN: SYNTHF; ISSN: 0039-7881

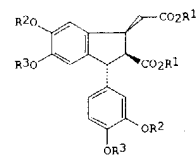
DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I



II

AB Cinnamic (3-phenylpropenoic) acids and esters bearing hydroxy and/or alkoxy groups at C-3 and C-4 on the benzene ring, I (R1 = Me, Et, H, R2 = Me, R3 = Me, Et, H; R2R3 = CH2), undergo cyclodimerization on treatment with trifluoroacetic acid to yield the corresponding [t-3-aryl-c-2-carboxy[or alkoxy]carbonyl]-r-1-indanyl]acetic acids or esters II.

IT 144878-41-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

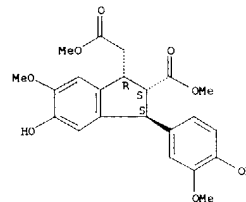
(preparation and reduction of)

RN 144878-41-1 CAPLUS

CN 1H-Indene-1-acetic acid, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-2-(methoxycarbonyl)-, methyl ester, (1a,2a,3b)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

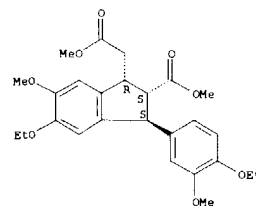
L60 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 144878-43-3 CAPLUS

CN 1H-Indene-1-acetic acid, 5-ethoxy-3-(4-ethoxy-3-methoxyphenyl)-2,3-dihydro-6-methoxy-2-(methoxycarbonyl)-, methyl ester, (1a,2a,3b)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

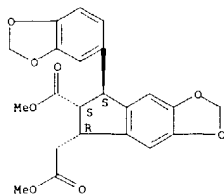


RN 144878-44-4 CAPLUS

CN 5H-Indeno[5,6-d]-1,3-dioxole-5-acetic acid, 7-(1,3-benzodioxol-5-yl)-6,7-dihydro-6-(methoxycarbonyl)-, methyl ester, (5R,6S,7S)-rel- (9CI) (CA INDEX NAME)

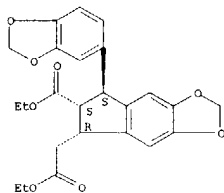
Relative stereochemistry.

L60 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 144878-45-5 CAPLUS  
CN 5H-Indeno[5,6-d]-1,3-dioxole-5-acetic acid, 7-(1,3-benzodioxol-5-yl)-6-(ethoxycarbonyl)-6,7-dihydro-, ethyl ester, (5 $\alpha$ ,6 $\alpha$ ,7 $\beta$ )-(9CI) (CA INDEX NAME)

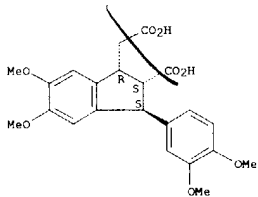
Relative stereochemistry.



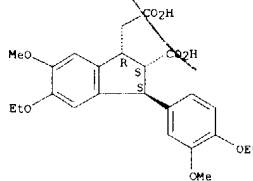
RN 144878-46-6 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-5-ethoxy-3-(4-ethoxy-3-methoxyphenyl)-2,3-dihydro-6-methoxy-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

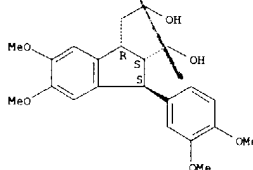


L60 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 144878-47-7 CAPLUS  
CN 1H-Indene-1-ethanol, 3-(3,4-dimethoxyphenyl)-2,3-dihydro-2-(hydroxymethyl)-5,6-dimethoxy-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

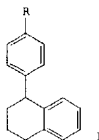


RN 144939-16-2 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L60 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

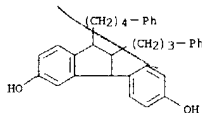
ACCESSION NUMBER: 1991:163680 CAPLUS  
DOCUMENT NUMBER: 114:163680  
TITLE: A systematic study of benzyl cation initiated cyclization reactions  
AUTHOR(S): Angle, Steven R.; Louie, Michael S.  
CORPORATE SOURCE: Dep. Chem., Univ. California, Riverside, CA, 92521, USA  
SOURCE: Journal of Organic Chemistry (1991), 56(8), 2853-66  
CODEN: JOCEAH; ISSN: 0022-3263  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 114:163680  
GI



AB A systematic investigation of benzyl cation initiated cyclization reactions to form six-membered carbocycles is presented. The generation of benzyl cations from benzylic bromides, ethers, and alcohols followed by intramolecular capture provided good yields of cyclized products by use of several different cyclization terminators (e.g., Ph, alkene,  $\beta$ -keto ester). A study on the effect of changing the electronic nature of substituents para to the benzyl cation showed that even electron-withdrawing substituents such as quaternary ammonium afford high yields of cyclization products. Thus, 4-RC6H4CHR1(CH2)3Ph (R = OH, MeO, Me3CMe2Si, H, Cl, OAc, CO2H, CO2Me, CF3, Me2N, cyano, NMe3+I-; R1 = MeOCH2CH2OCH2, MeO, HO, Br) were treated with TiCl3 in CH2Cl2 to give 12-98% the tetrahydronaphthalenes I. The formation of five- and seven-membered carbocycles was briefly investigated and found to be less general than the formation of the six-membered carbocycles.

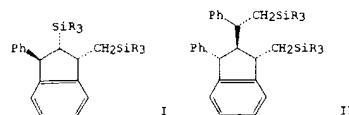
17 132777-35-6P  
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 132777-35-6 CAPLUS  
CN 1H-Inden-5-ol, 2,3-dihydro-3-(4-hydroxyphenyl)-1-(4-phenylbutyl)-2-(3-phenylpropyl)-(9CI) (CA INDEX NAME)



L60 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

✓  
 L60 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1991:143528 CAPLUS  
 DOCUMENT NUMBER: 114:143528  
 TITLE: Diastereoselective addition of carbon electrophiles to styrylsilanes: the dimerization of  $\beta$ -(E)-(halosilyl)styrenes  
 AUTHOR(S): Brook, Michael A.; Sebastian, Thomas; Jueschke, Ralf; Dallaire, Carol  
 CORPORATE SOURCE: Dep. Chem., McMaster Univ., Hamilton, ON, L8S 4M1, Can.  
 SOURCE: Journal of Organic Chemistry (1991), 56(7), 2273-4  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 114:143528  
 GI



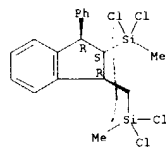
AB  $\beta$ -Silylstyrenes bearing silyl groups with poor leaving group ability ( $\text{SiCl}_3$ ,  $\text{SiCl}_2\text{Me}$ ) undergo addition reactions (dimerization and trimerization) with triflic acid catalysts leading to 1,2,3-trisubstituted-1H-dihydroindans, e.g., I, II ( $R = \text{Cl}$ ), with high diastereoselectivity. The steric course of the reaction is highly dependent upon the electron withdrawing ability of the silyl group. The crystal structures of I and II ( $R = \text{Me}$ ) were determined.

IT 132514-91-1P 132514-92-2P 132514-93-3P  
 132617-40-4P 132617-41-5P 132617-42-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 132514-91-1 CAPLUS  
 CN Silane, dichloro[[2-(dichloromethylsilyl) 2,3-dihydro-3-phenyl-1H-inden-1-yl]methyl]methyl-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )- (9CI) (CA INDEX NAME)

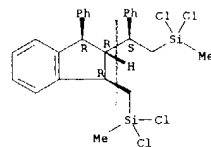
Relative stereochemistry.

L60 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



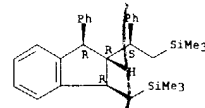
RN 132514-92-2 CAPLUS  
 CN Silane, dichloro[[2-[1-[(dichloromethylsilyl)methyl]-2,3-dihydro-3-phenyl-1H-inden-2-yl]-2-phenylethyl]methyl]-, (1 $\alpha$ ,2 $\beta$ (S\*),3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 132514-93-3 CAPLUS  
 CN Silane, [[2,3-dihydro-3-phenyl-2-[1-phenyl-2-(trimethylsilyl)ethyl]-1H-inden-1-yl]methyl]trimethyl-, (1 $\alpha$ ,2 $\beta$ (S\*),3 $\alpha$ )- (9CI) (CA INDEX NAME)

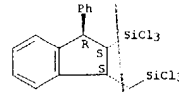
Relative stereochemistry.



RN 132617-40-4 CAPLUS  
 CN Silane, trichloro[[2,3-dihydro-3-phenyl-2-(trichlorosilyl)-1H-inden-1-yl]methyl]-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )- (9CI) (CA INDEX NAME)

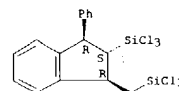
Relative stereochemistry.

L60 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



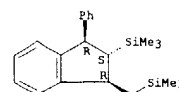
RN 132617-41-5 CAPLUS  
 CN Silane, trichloro[[2,3-dihydro-3-phenyl-2-(trichlorosilyl)-1H-inden-1-yl]methyl]-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 132617-42-6 CAPLUS  
 CN Silane, [[2,3-dihydro-3-phenyl-2-(trimethylsilyl)-1H-inden-1-yl]methyl]trimethyl-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )- (9CI) (CA INDEX NAME)

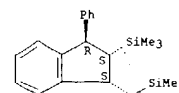
Relative stereochemistry.



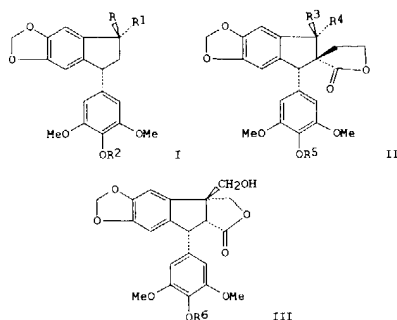
IT 132514-90-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation, crystal and mol. structure of)

RN 132514-90-0 CAPLUS  
 CN Silane, [[2,3-dihydro-3-phenyl-2-(trimethylsilyl)-1H-inden-1-yl]methyl]trimethyl-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.

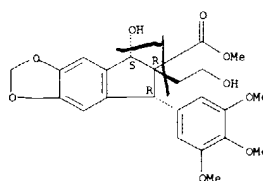


L60 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1991:142960 CAPLUS  
 DOCUMENT NUMBER: 114:142960  
 TITLE: Synthesis and antitumor activity of structural analogs of the epipodophyllotoxins  
 AUTHOR(S): Klein, Larry L.; Yeung, Clinton M.; Chu, Daniel T.; McDonald, Edith J.; Clement, Jacob J.; Plattner, Jacob J.  
 CORPORATE SOURCE: Anti-Infect. Div., Abbott Lab., Abbott Park, IL, 60064, USA  
 SOURCE: Journal of Medicinal Chemistry (1991), 34(3), 984-92  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 114:142960  
 GI



AB Several ring-contracted analogs of the antitumor agent etoposide, e.g., I (R = H, OH, OMe; R1 = H, OMe; R2 = H, Me) and II (R3, R4 = H, OH; R5 = H, Me), were prepared. C15-fused lactone III (R6 = H, Me), which are isomeric with the etoposide aglycon, were synthesized via a dialkylation of the indene-2-carboxylate anion. Regiochem. and stereochem. results of these alkylations are described. The cytotoxicity of these derivs. toward several tumor cell lines is described and generally follows the structure-activity relationships known for podophyllotoxin. I (R = H, R1 = OH, R2 = H) was the most potent antitumor agent prepared.  
 IT 132127-76-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L60 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 (prepn. and intramol. cyclocondensation of, furan and lactone from)  
 RN 132127-76-5 CAPLUS  
 CN 5H-Indeno[5,6-d]-1,3-dioxole-6-carboxylic acid, 6,7-dihydro-5-hydroxy-6-(2-hydroxyethyl)-7-(3,4,5-trimethoxyphenyl)-, methyl ester, (5a,6a,7a)- (9CI) (CA INDEX NAME)  
 Relative stereochemistry.

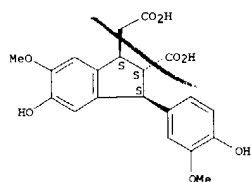


L60 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1990:474788 CAPLUS  
 DOCUMENT NUMBER: 113:74788  
 TITLE: Monomeric and dimeric phenolic constituents of plant cell walls - possible factors influencing wall biodegradability  
 AUTHOR(S): Eraso, Fatima; Hartley, Roy D.  
 CORPORATE SOURCE: Inst. Grassl. Anim. Prod., AFRC, Maidenhead/Berkshire, SL6 5LR, UK  
 SOURCE: Journal of the Science of Food and Agriculture (1990), 51(2), 163-70  
 CODEN: JSFAAE; ISSN: 0022-5142  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A range of plant cell walls from graminaceous and leguminous plants was examined qual. and quant. for monomeric and dimeric phenolic constituents that were released by treatment with NaOH. The total amts. of phenolics released from the walls of the graminaceous plants varied from 8 to 28 mg g<sup>-1</sup> walls compared with <3 mg g<sup>-1</sup> walls from the legumes. p-Coumaric and ferulic acids were the major components of the monomeric fraction. The cell walls also contained substituted cyclobutanes having mol. wts. equal to two p-coumaric acid mols., two ferulic acid mols. or one p-coumaric plus one ferulic acid mol. All the walls contained dehydrodiferulic acid. If it is assumed that the substituted cyclobutanes and dehydrodiferulic acid arise from dimerization of feruloyl and p-coumaroyl groups linked to cell wall polysaccharides, then, for the graminaceous walls, it is calculated that between 5 and 14% of these groups had converted to dimers. This dimerization process may limit the biodegradability of the wall polysaccharides.

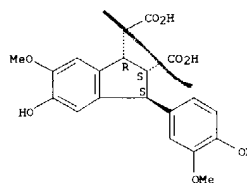
IT 128440-93-7 128440-94-8  
 RL: BIOL (Biological study)  
 (of plant cell walls, biodegradability in relation to)  
 RN 128440-93-7 CAPLUS  
 CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-, (1a,2a,3a)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 128440-94-8 CAPLUS  
 CN 1H-Indene-1-acetic acid, 2-carboxy-2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-, (1a,2a,3a)- (9CI) (CA INDEX NAME)

L60 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 Relative stereochemistry.



ANSWER 33 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 QUESTION NUMBER: 1989:553640 CAPLUS  
 DOCUMENT NUMBER: 111:153640  
 TITLE: Preparation and testing of alpha, alpha-disubstituted aromatics and heteroaromatics as cognition enhancers  
 INVENTOR(S): Earl, Richard Alan; Myers, Melvyn John; Nickolson, Victor Johannes  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA  
 SOURCE: Eur. Pat. Appl., 136 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

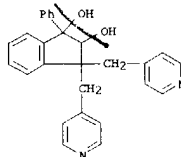
| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| EP 311010   | A2   | 19890412 | EP 1988-116393  | 19881004 |
| EP 311010   | A3   | 19910130 |                 |          |
| EP 311010   | B1   | 19940202 |                 |          |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE |      |          |                 |          |
| US 5173489  | A    | 19921222 | US 1988-234382  | 19880823 |
| CA 1339127  | A1   | 19970729 | CA 1988-578607  | 19880927 |
| EP 532054   | A1   | 19930317 | EP 1992-115889  | 19881004 |
| EP 532054   | B1   | 19990609 |                 |          |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE |      |          |                 |          |
| AT 101148   | E    | 19940215 | AT 1988-116393  | 19881004 |
| ES 2061587  | T3   | 19941216 | ES 1988-116393  | 19881004 |
| AT 181070   | E    | 19990615 | AT 1992-115889  | 19881004 |
| ES 2137170  | T3   | 19991216 | ES 1992-115889  | 19881004 |
| DK 8805569  | A    | 19890407 | DK 1988-5568    | 19881005 |
| FI 8804582  | A    | 19890407 | FI 1988-4582    | 19881005 |
| FI 93446  | B    | 19941230 |                 |          |
| FI 93446  | C    | 19950410 |                 |          |
| NO 8804433  | A    | 19890407 | NO 1988-4433    | 19881005 |
| NO 174390   | B    | 19940117 |                 |          |
| NO 174390   | C    | 19940427 |                 |          |
| HU 48618  | A2   | 19890628 | HU 1988-5166    | 19881005 |
| HU 205900   | B    | 19920728 |                 |          |
| JP 01207268   | A2   | 19890821 | JP 1988-250042  | 19881005 |
| JP 2563522  | B2   | 19961211 |                 |          |
| SU 1750425  | A3   | 19920723 | SU 1988-4356717 | 19881005 |
| IL 87929  | A1   | 19930315 | IL 1988-87929   | 19881005 |
| AU 8823508  | A1   | 19890406 | AU 1988-23508   | 19881006 |
| AU 628021   | B2   | 19920910 |                 |          |
| ZA 8807508  | A    | 19900627 | ZA 1988-7508    | 19881006 |
| KR 9706101  | B1   | 19970423 | KR 1988-13031   | 19881006 |
| US 5300642  | A    | 19940405 | US 1992-953274  | 19920930 |
| US 5434264  | A    | 19950718 | US 1992-953273  | 19920930 |
| NO 9301459  | A    | 19890407 | NO 1993-1459    | 19930421 |
| NO 175057   | C    | 19940824 |                 |          |
| NO 175057   | B    | 19940516 |                 |          |

PRIORITY APPLN. INFO.:

US 1987-105156 A 19871006  
 US 1988-234382 A 19880823  
 US 1986-850015 B2 19860410  
 US 1987-944953 A2 19870105

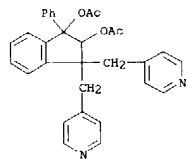
L60 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 QUESTION NUMBER: 1989:553640 CAPLUS  
 DOCUMENT NUMBER: 111:153640  
 TITLE: Preparation and testing of alpha, alpha-disubstituted aromatics and heteroaromatics as cognition enhancers

OTHER SOURCE(S): MARPAT 111:153640  
 GI For diagram(s), see printed CA Issue.  
 AB The title compds. (I: R1 = 2-, 3-, or 4-pyridyl, 2-, 4-, or 5-pyrimidinyl; R2 = R1, 2-pyrazinyl, 3- or 4-pyridazinyl, 3- or 4-pyrazolyl, 2- or 3-tetrahydrofuryl, 3-thienyl; XY = atoms to complete an (unsatd.) carbocyclic or heterocyclic ring which is fused to >1 addnl. (hetero)aromatic ring), useful as cognitive performance enhancers, were prepared N-Phenylindolin-2-one in C6H6 was treated with thallium ethoxide and the mixture was refluxed to give 85% of the thallium salt of N-phenylindolin-2-one. The latter was added to picolyl chloride in C6H6 and the mixture was refluxed overnight to give 3,3-bis(2-pyridylmethyl)-1-phenylindolin-2-one (II). I, HCl at 5 mg/kg s.c. in rats gave 54% enhancement of active avoidance performance.  
 IT 122955-72-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and acetylation of, in preparation of cognitive performance enhancer)  
 RN 122955-72-0 CAPLUS  
 CN 1H-Indene-1,2-diol, 2,3-dihydro-1-phenyl-3,3-bis(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)



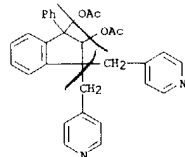
IT 122955-25-3P 122955-73-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as cognitive performance enhancer)  
 RN 122955-25-3 CAPLUS  
 CN 1H-Indene-1,2-diol, 2,3-dihydro-1-phenyl-3,3-bis(4-pyridinylmethyl)-, diacetate (ester), dihydrochloride (9CI) (CA INDEX NAME)

L60 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

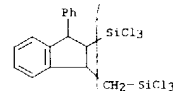


● 2 HCl

RN 122955-73-1 CAPLUS  
 CN 1H-Indene-1,2-diol, 2,3-dihydro-1-phenyl-3,3-bis(4-pyridinylmethyl)-, diacetate (ester) (9CI) (CA INDEX NAME)



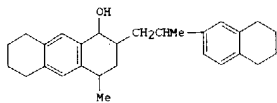
ANSWER 34 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 QUESTION NUMBER: 1989:534840 CAPLUS  
 DOCUMENT NUMBER: 111:134840  
 TITLE: Oligo(trichlorosilyl)styrenes: highly functionalized silicone precursors  
 AUTHOR(S): Brook, Michael A.; Huelser, Peter; Sebastian, Thomas  
 CORPORATE SOURCE: Dep. Chem., McMaster Univ., Hamilton, ON, L8S 4M1, Can.  
 SOURCE: Macromolecules (1989), 22(9), 3814-16  
 CODEN: MAMOBX; ISSN: 0024-9297  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB  $\beta$ -Trichlorosilylstyrenes undergo oligomerization processes in the presence of triflic acid. In contrast to  $\beta$ -trimethylsilylstyrenes which lose the silyl group under these strongly cationic conditions, the trichlorosilyl group is a sufficiently poor leaving group that it remains on the growing chain end, resulting from the  $\beta$ -stabilization of the carbonium ion at the growing chain end, is a controlling feature in both the propagation and termination steps.  
 IT 121987-99-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, catalyst for)  
 RN 121987-99-3 CAPLUS  
 CN Silane, trichloro[2,3-dihydro-3-phenyl-2-(trichlorosilyl)-1H-inden-1-yl]methyl- (9CI) (CA INDEX NAME)



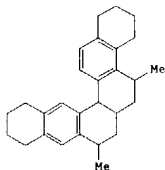
160 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1989:423195 CAPLUS  
 DOCUMENT NUMBER: 111:23195  
 TITLE:

Polynuclear aromatic hydrocarbons. Part XXVI.  
 Acid-catalyzed rearrangement through spirocyclic  
 systems: synthesis of 5,8-dimethylphenanthro[1,2-  
 a]anthracene  
 Sharma, K. S.; Taneja, K. L.; Sarita; Mukherji, S. M.  
 Dep. Chem., M D Univ., Rohtak, 124 001, India  
 Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1988),  
 27B(4), 327-9  
 CODEN: IJCSDB; ISSN: 0376-4699

DOCUMENT TYPE:  
 LANGUAGE:  
 OTHER SOURCE(S):  
 GI



I

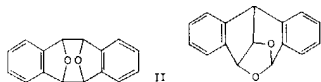


II

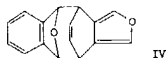
AB H2SO4-catalyzed cyclization of anthracene I obtained by Colonge-Mukherji  
 cycloalkylation of tetralin with 2-allyl-4-methyl-1-oxo-1,2,3,4,5,6,7,8-  
 octahydroanthracene, followed by Meerwein-Ponndorf-Verley reduction, affords  
 phenanthroanthracene II, presumably through the acid-catalyzed  
 rearrangement of the spirocyclic intermediate, instead of the desired  
 anthra[1,2-a]anthracene. I on dehydrogenation gives the title compound  
 IT 120983-38-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclization of, rearrangement in)  
 RN 120983-38-2 CAPLUS  
 CN 1H-Inden-1-ol, 2,3-dihydro-3-phenyl-2-[2-(5,6,7,8-tetrahydro-2-  
 naphthalenyl)propyl]- (9CI) (CA INDEX NAME)

160 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1983:89094 CAPLUS  
 DOCUMENT NUMBER: 98:89094  
 TITLE:

Photodimers of isobenzofuran: a novel application of  
 lanthanide induced shift spectroscopy to determine  
 stereochemistry  
 Warrenner, Ronald N.; Pitt, Ian G.; Russell, Richard A.  
 Dep. Chem., Aust. Natl. Univ., Canberra, 2600,  
 Australia  
 Journal of the Chemical Society, Chemical  
 Communications (1982), (20), 1195-7  
 CODEN: JCCCAT; ISSN: 0022-4936  
 DOCUMENT TYPE:  
 LANGUAGE:  
 OTHER SOURCE(S):  
 GI



III

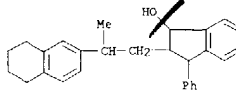


IV

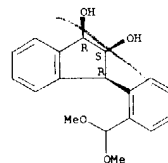
AB UV irradiation of isobenzofuran (I) in degassed Me2CO solution at -60°  
 gave the [8 + 8] dimer II; lanthanide-shift NMR studies showed II has anti  
 stereochem. Similar irradiation of I in degassed Et2O gave the unsym. dimer  
 III and the [8 + 4] dimer IV; the structure of III was confirmed by  
 unambiguous synthesis.  
 IT 84657-76-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and intramol. cyclocondensation reaction of)  
 RN 84657-76-1 CAPLUS  
 CN 1H-Indene-1,2-diol, 3-[2-(dimethoxymethyl)phenyl]-2,3-dihydro-,  
 (1a,2a,3a)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

160 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

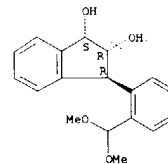


160 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



IT 84710-53-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 84710-53-2 CAPLUS  
 CN 1H-Indene-1,2-diol, 3-[2-(dimethoxymethyl)phenyl]-2,3-dihydro-,  
 (1a,2a,3a)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



160 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2004 ACS ON STN

ACCESSION NUMBER: 1982:198734 CAPLUS

DOCUMENT NUMBER: 96:198734

TITLE: Reaction of 1-substituted indenenes with diborane or N-bromoacetamide in protic solvents. The effect of the substituent on the stereochemistry of addition

AUTHOR(S): Miura, Masahiro; Yoshida, Masaya; Nojima, Masatomo; Kusabayashi, Shigekazu

CORPORATE SOURCE: Dep. Appl. Chem., Osaka Univ., Osaka, 565, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999)

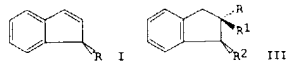
(1982), (1), 79-83

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The reactions of 1-substituted indenenes with diborane and with AcNHBr in protic solvents were studied to determine the effect of an increase of steric bulk of the substituent on the stereochem. course of the addition. In the hydroboration reaction the proportion of products arising from attack of the diborane from the less hindered side increased as the steric bulk of the substituent at C-1 increased. E.g., reaction of I (R = Me) (II) with diborane at 20° for 15 min followed by oxidation with aqueous H<sub>2</sub>O<sub>2</sub> and acetylation gave a 71:29 mixture of III (R = OAc, R<sub>1</sub> = H; R = H, R<sub>1</sub> = OAc; R<sub>2</sub> = Me) whereas under the same conditions I (R = Ph) (IV) gave III (R = OAc, R<sub>1</sub> = H, R<sub>2</sub> = Ph) exclusively. The reaction with AcNHBr in aqueous dioxane followed by acetylation gave a mixture of 3-substituted 1-acetoxy-2-bromoidenenes with trans,trans and trans,cis configuration. III gave mainly trans,trans-1-acetoxy-2-bromo-3-phenylindane whereas with II the major product was trans,cis-1-acetoxy-2-bromo-3-methylindane.

IT 81707-16-6P 81707-19-9P 81707-31-5P

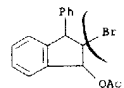
81739-64-2P 81739-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

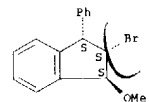
(preparation of)

RN 81707-16-6 CAPLUS

CN 1H-Indene-1-ol, 2-bromo-2,3-dihydro-3-phenyl-, acetate, (1a,2b,3a)- (9CI) (CA INDEX NAME)



160 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2004 ACS ON STN (Continued)

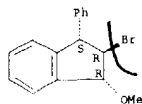


160 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2004 ACS ON STN (Continued)

RN 81707-19-9 CAPLUS

CN 1H-Indene, 2-bromo-2,3-dihydro-1-methoxy-3-phenyl-, (1a,2b,3a)- (9CI) (CA INDEX NAME)

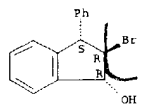
Relative stereochemistry.



RN 81707-31-5 CAPLUS

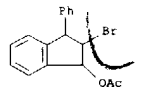
CN 1H-Indene-1-ol, 2-bromo-2,3-dihydro-3-phenyl-, (1a,2b,3a)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 81739-64-2 CAPLUS

CN 1H-Indene-1-ol, 2-bromo-2,3-dihydro-3-phenyl-, acetate, (1a,2b,3b)- (9CI) (CA INDEX NAME)



RN 81739-67-5 CAPLUS

CN 1H-Indene, 2-bromo-2,3-dihydro-1-methoxy-3-phenyl-, (1a,2b,3b)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



160 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2004 ACS ON STN

ACCESSION NUMBER: 1975:97951 CAPLUS

DOCUMENT NUMBER: 82:97951

TITLE: Hypolipemic hydrogenated indeno[1,2-b]pyridin-2-ones and -thiones

INVENTOR(S): Kunstmann, Rudolf; Granzer, Erno; Erno

PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.

SOURCE: Ger. Offen., 31 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| DE 2325581             | A1   | 19741205 | DE 1973-2325581 | 19730519 |
| ES 426264              | A1   | 19761216 | ES 1974-426264  | 19740513 |
| NL 7406457             | A    | 19741121 | NL 1974-6457    | 19740514 |
| US 3980656             | A    | 19760914 | US 1974-470667  | 19740516 |
| ZA 7403148             | A    | 19750528 | ZA 1974-3148    | 19740517 |
| AU 7469088             | A1   | 19751120 | AU 1974-69088   | 19740517 |
| GB 1470339             | A    | 19770414 | GB 1974-22186   | 19740517 |
| AT 7404107             | A    | 19770415 | AT 1974-4107    | 19740517 |
| AT 340421              | B    | 19771212 |                 |          |
| CH 605786              | A    | 19781013 | CH 1974-6825    | 19740517 |
| CH 605789              | A    | 19781013 | CH 1977-13801   | 19740517 |
| CH 605788              | A    | 19781013 | CH 1977-13800   | 19740517 |
| DK 139428              | B    | 19790219 | DK 1974-2714    | 19740517 |
| DK 139428              | C    | 19790730 |                 |          |
| SE 407938              | B    | 19790430 | SE 1974-6595    | 19740517 |
| JP 50030889            | A2   | 19750327 | JP 1974-55028   | 19740518 |
| BE 815278              | A1   | 19741120 | BE 1974-144524  | 19740520 |
| FR 2229420             | A1   | 19741213 | FR 1974-17495   | 19740520 |
| AT 7609584             | A    | 19770415 | AT 1976-9584    | 19761223 |
| AT 340423              | B    | 19771212 |                 |          |
| AT 7609585             | A    | 19770415 | AT 1976-9585    | 19761223 |
| AT 340424              | B    | 19771212 |                 |          |
| SE 7701261             | A    | 19770204 | SE 1977-1261    | 19770204 |
| PRIORITY APPLN. INFO.: |      |          | DE 1973-2325581 | 19730519 |
|                        |      |          | AT 1974-4107    | 19740517 |

GI For diagram(s), see printed CA issue.

AB About 20 indeno[1,2-b]pyridines I [X = O or S; R<sub>1</sub> = H, 7-Cl, 7-MeO, or 7,8-(MeO)<sub>2</sub>; R<sub>2</sub> = Ph, 4-ClC<sub>6</sub>H<sub>4</sub>, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, or 4-pyridyl], their 2,3,4,4a,5,9b-hexahydro-1H analogs (II), or their hydrochlorides, e.g. 2,3,4,4a,5,9b-hexahydro-5-phenyl-1H-indeno[1,2-b]pyridin-2-one (III), were prepared. I and II had anticholesteremic and hypolipemic activity when tested orally in the rat. Thus, PhCO(CH<sub>2</sub>)<sub>3</sub>CN or 3,4-dihydro-6-phenyl-2-pyridinone and 4-ClC<sub>6</sub>H<sub>4</sub>CHO were treated with 85% H<sub>3</sub>PO<sub>4</sub> and P<sub>2</sub>O<sub>5</sub> at 80° to give I (X = O; R<sub>1</sub> = H; R<sub>2</sub> = 4-ClC<sub>6</sub>H<sub>4</sub>). The pyridone IV was heated in 85% H<sub>3</sub>PO<sub>4</sub> and P<sub>2</sub>O<sub>5</sub> at 80° to give I (X = O; R<sub>1</sub> = H; R<sub>2</sub> = Ph), which on hydrogenation over Raney-Ni or treatment with P<sub>2</sub>S<sub>5</sub> in pyridine gave III or I (X = S; R<sub>1</sub> = H; R<sub>2</sub> = Ph), resp.

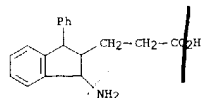
IT 54959-89-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and cyclization of)

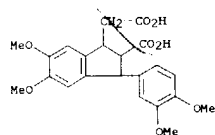
RN 54959-89-6 CAPLUS

CN 1H-Indene-2-propanoic acid, 1-amino-2,3-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

L60 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

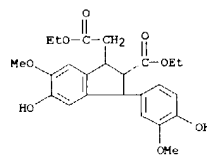


RN 53669-41-3 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)



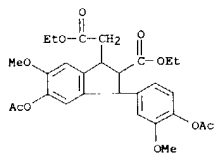
L60 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1975:15802 CAPLUS  
DOCUMENT NUMBER: 82:15802  
TITLE: Carbon-13 NMR spectra of lignins. 1. Chemical shifts of monomeric and dimeric model substances  
AUTHOR(S): Luedemann, Hans D.; Nimz, Horst  
CORPORATE SOURCE: Fachbereich Biol., Univ. Regensburg, Regensburg, Fed. Rep. Ger.  
SOURCE: Makromolekulare Chemie (1974), 175(8), 2393-407  
CODEN: MACEAK; ISSN: 0025-116X  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
GI For diagram(s), see printed CA Issue.  
AB The <sup>13</sup>C chemical shifts of 14 monomeric, e.g., I (R<sub>1</sub> = H, R = CHO; R<sub>1</sub> = OH, R = CO<sub>2</sub>H) and 25 dimeric, e.g., II, lignin model benzene derivs. were determined  
The influence of the MeO group, ortho to the phenolic OH or OR group, on the chemical shifts of the aromatic C atoms was examined. These compds. were used for the assignment of the <sup>13</sup>C NMR of angio- and gymnosperm lignins.  
IT 53669-39-9 53669-40-2 53669-41-3  
RL: PREP (Properties)  
(Carbon-13 NMR of)  
RN 53669-39-9 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-(ethoxycarbonyl)-2,3-dihydro-5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-6-methoxy-, ethyl ester (9CI) (CA INDEX NAME)

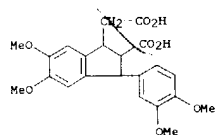


RN 53669-40-2 CAPLUS  
CN 1H-Indene-1-acetic acid, 5-(acetyloxy)-3-[4-(acetyloxy)-3-methoxyphenyl]-2-(ethoxycarbonyl)-2,3-dihydro-6-methoxy-, ethyl ester (9CI) (CA INDEX NAME)

L60 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

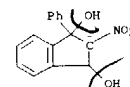


RN 53669-41-3 CAPLUS  
CN 1H-Indene-1-acetic acid, 2-carboxy-3-(3,4-dimethoxyphenyl)-2,3-dihydro-5,6-dimethoxy- (9CI) (CA INDEX NAME)

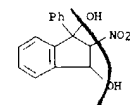


L60 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1972:501273 CAPLUS  
DOCUMENT NUMBER: 77:101273  
TITLE: Synthesis and transformations of 2-nitro-1-phenyl-1-hydroxyindene and its isomer  
AUTHOR(S): Schneider, J.; Evans, E. L.; Fryer, R. Ian  
CORPORATE SOURCE: Hoffman-La Roche, Inc., Nutley, NJ, USA  
SOURCE: Journal of Organic Chemistry (1972), 37(16), 2604-8  
CODEN: JOCEAH; ISSN: 0022-3263  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Condensation of 2-benzoylbenzaldehyde with MeNO<sub>2</sub> in the presence of NaOMe gave, after acidification, 2-nitro-1-phenyl-1-hydroxyindene, 2-nitro-3-phenyl-1-hydroxyindene, and 2-nitro-1-phenyl-1,3-dihydroxyindane. The first 2 compds. were converted to the corresponding acetates (I) and (II) which on treatment with primary or secondary amines gave the nitroenamines (III) and the ammonium salts (IV) of 2-nitro-1-phenyl-3-indanone (V), resp. Hydrolysis of III or IV afforded V. Treatment of the acetate I with alics. yielded 2-nitro-1-phenyl-1-alkoxyindene (VI). After prolonged reflux the isomeric 2-nitro-1-phenyl-3-alkoxyindene (VII) was obtained. A catalytic amount of Et<sub>3</sub>N rearranges VI to VII.  
IT 34764-52-8P 34764-55-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 34764-52-8 CAPLUS  
CN 1H-Indene-1,3-diol, 2,3-dihydro-2-nitro-1-phenyl-, ion(1-), sodium (9CI) (CA INDEX NAME)

● Na<sup>+</sup>

RN 34764-55-1 CAPLUS  
CN 1H-Indene-1,3-diol, 2,3-dihydro-2-nitro-1-phenyl- (9CI) (CA INDEX NAME)



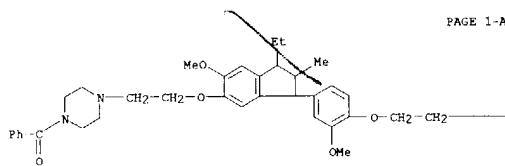


09/976,929

ANSWER 41 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1971405559 CAPLUS  
 DOCUMENT NUMBER: 75:5559  
 TITLE: Pharmaceutical diisoeugenol derivatives  
 PATENT ASSIGNEE(S): Egyesult Gyogyszer es Tapszergyar  
 SOURCE: Fr. M., 3 pp.  
 CODEN: FMXXAU  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.           | KIND | DATE     | APPLICATION NO. | DATE     |
|----------------------|------|----------|-----------------|----------|
| FR 7067              |      | 19690804 |                 |          |
| DE 1643957           |      |          | DE              |          |
| US 3637853           |      | 19720000 | US              |          |
| PRIORITY APPL. INFO. |      | HU       |                 | 19661126 |

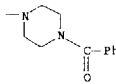
GI For diagram(s), see printed CA Issue.  
 AB Diisoeugenol derivs. I (R = aminoalkyl) were prepared from I (R = H). Thus, I (R = H) and Et2NCH2CH2Cl in alkaline aqueous iso-PrOH was distilled to yield I (R = Et2NCH2CH2). An addnl. 3 examples are given. The compds. exhibit hypertensive action as well as spontaneous spasmolytic activity.  
 IT 32228-02-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 32228-02-7 CAPLUS  
 CN Piperazine, 1-benzoyl-4-[2-[4-[6-[2-(4-benzoyl-1-piperazinyl)ethoxy]-3-ethyl-5-methoxy-2-methyl-1-indanyl]-2-methoxyphenoxy]ethyl]-, dihydrochloride (8CI) (CA INDEX NAME)



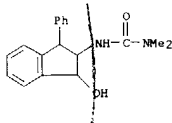
●2 HCl

L60 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

PAGE 1-B



ANSWER 42 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1970:435300 CAPLUS  
 DOCUMENT NUMBER: 73:35300  
 TITLE: Synthesis and screening for antidepressant activity of some aminoindanooxazolines, aminoindanooxazines, and aminoacnaphthoxazolines  
 AUTHOR(S): Trepanier, Donald L.; Faith, H. Eldridge; Ebble, John N.  
 CORPORATE SOURCE: Chem. Res. and Pharmacol. Dep., Dow Chem. Co., Zionsville, IN, USA  
 SOURCE: Journal of Medicinal Chemistry (1970), 13(4), 729-33  
 CODEN: JMCHAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Some aminoindanooxazolines, aminoindanooxazines, and aminoacnaphthoxazolines with spatial orientations similar to those of the tricyclic drugs were synthesized and tested for potential antidepressant activity. None were able to prevent reserpine ptosis. Some potentiated d-amphetamine toxicity and prolonged hexobarbital sleep time in mice.  
 IT 27271-40-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 27271-40-5 CAPLUS  
 CN Urea, 3-[1-hydroxy-3-phenyl-2-indanyl]-1,1-dimethyl- (8CI) (CA INDEX NAME)

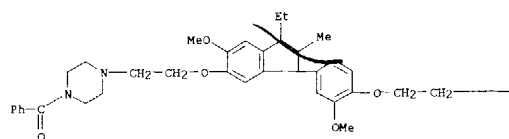


ANSWER 43 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1968:486698 CAPLUS  
 DOCUMENT NUMBER: 69:86698  
 TITLE: O,O'-Disubstituted diisoeugenol derivatives  
 INVENTOR(S): Korosi, Jeno; Lang, Tibor; Pataky, Istvan  
 PATENT ASSIGNEE(S): Egyesult Gyogyszer es Tapszergyar  
 SOURCE: Hung., 8 pp.  
 CODEN: HUXXAT  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Hungarian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| HU 154664  |      | 19680430 | HU              | 19661126 |
| GB 1199040 |      |          | GB              |          |

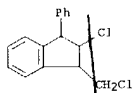
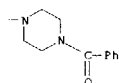
AB A mixture of 0.05 mole diisoeugenol (I), 0.205 mole K2CO3 in 50 ml. H2O, 0.104 mole Et2NCH2CH2Cl, and 300 ml. iso-PrOH was concentrated to dryness on a water bath in 2 hrs., the residue was dissolved in a mixture of 150 ml. C6H6 and 50 ml. H2O, the organic phase was extracted with a mixture of 75 ml. H2O and 10 ml. AcOH, the aqueous phase was treated with NH4OH, and the oily product dissolved in C6H6 and treated with HCl gas to deposit 27.3 g. O,O'-bis[β-(diethylamino)ethyl]-diisoeugenol-2 HCl, m. 168-70°. Similarly, 2.05 moles Me2N-CH2CH2CH2Cl was added dropwise with stirring to a mixture of 1 mole I, 2.05 mole KOH, and 2 l. EtOH at reflux in 3 hrs., the mixture was refluxed for a further 30 min., cooled, and filtered, the KCl washed with EtOH, and the combined filtrate and washings were worked up to yield 496 g. O,O'-bis[γ-(dimethylamino)propyl] diisoeugenol base, m. 111-13° (petroleum ether), hydrochloride m. 214.5-16.0 (iso-PrOH); maleate m. 158-60° (EtOH-Me2CO); and tartrate m. 178-81° (EtOH-Me2CO).  
 O,O'-Bis(γ-piperidinopropyl)diisoeugenol-2HCl, m. 212-14° and O,O'-bis[β-(4-benzoyl-1-piperazinyl)ethyl]diisoeugenol-2HCl, m. 192°, were similarly prepared  
 IT 20004-77-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 20004-77-7 CAPLUS  
 CN Piperazine, 1-benzoyl-4-[2-[4-[6-[2-(4-benzoyl-1-piperazinyl)ethoxy]-3-ethyl-5-methoxy-2-methyl-1-indanyl]-2-methoxyphenoxy]ethyl]-, dihydrochloride (8CI) (CA INDEX NAME)

PAGE 1-A

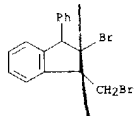


● 2 HCl

PAGE 1-B



RN 10436-99-4 CAPLUS  
CN Indan, 2-bromo-1-(bromomethyl)-3-phenyl- (7CI, 8CI) (CA INDEX NAME)



L60 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1966:499143 CAPLUS  
DOCUMENT NUMBER: 65:99143  
ORIGINAL REFERENCE NO.: 65:18525f-h  
TITLE: Dimerization of  $\beta$ -halostyrenes  
INVENTOR(S): Venrooy, John J. Van  
PATENT ASSIGNEE(S): Sun Oil Co.  
SOURCE: 3 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| US 3270068 |      | 19660830 | US              | 19631108 |

AB  $\beta$ -Chlorostyrene (I) and  $\beta$ -bromostyrene (II) were dimerized with a BF<sub>3</sub>.H<sub>3</sub>PO<sub>4</sub> coordination compound catalyst to produce substituted indans, resp., 1-chloromethyl-2-chloro-3-phenylindan (III) and 1-bromomethyl-2-bromo-3-phenylindan (IV). Thus, to 25 g. I (approx. equal parts cis and trans) was added with stirring 7 ml. BF<sub>3</sub>.H<sub>3</sub>PO<sub>4</sub> complex (prepared by bubbling BF<sub>3</sub> at room temperature into 100% H<sub>3</sub>PO<sub>4</sub>; complex is a sirupy clear liquid solidifying about -105°) during 1 hr. The temperature rose to 65-70° and was kept there 2 hrs. first by cooling, then by heating. The taffy-like mixture was dissolved in 250 ml. Et<sub>2</sub>O and the solution washed with 10% aqueous NaHCO<sub>3</sub> to remove catalyst, dried, concentrated, and the residue distilled to give III, b.p. 154-62°, as the major product (89%), plus a small amount (8%) of trimer, b.p. 162-8°. Similarly, 38.7 g. II and 10.5 g. BF<sub>3</sub>.H<sub>3</sub>PO<sub>4</sub> gave IV, b.p. 193-5°, as a viscous red liquid that crystallized on standing. Recrystn. from CCl<sub>4</sub> gave paleorange IV, m. 76-8°. III could also be crystallized. When dimerization of I was tried with other catalysts, no reaction occurred with BF<sub>3</sub>.Et<sub>2</sub>O, ZnCl<sub>2</sub>, or FeCl<sub>3</sub>; with AlCl<sub>3</sub> a violent reaction yielded a brown tar; with concentrated H<sub>2</sub>SO<sub>4</sub> dimerization was accompanied by side reactions, presumably including sulfonation of the aromatic rings. III and IV can be used as plasticizers for poly(vinyl chloride) and other resins and as intermediates for preparing flame retardants. Thus, III in CCl<sub>4</sub> was refluxed 6 hrs. in contact with Cl<sub>2</sub> gas and the mixture concentrated to a gum containing 40% Cl by weight (about 2 Cl atoms added per mol.). This product was useful as a flame retardant for resins. Similarly, chlorination of IV gave a product containing 54% total halogens (about 4 Cl atoms added per mol.), in which chlorination had occurred at both aromatic and nonaromatic C positions.

IT 10436-98-3, Indan, 2-chloro-1-(chloromethyl)-3-phenyl-  
10436-99-4, Indan, 2-bromo-1-(bromomethyl)-3-phenyl-  
(preparation of)

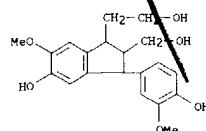
RN 10436-98-3 CAPLUS  
CN 1H-Indene, 2-chloro-1-(chloromethyl)-2,3-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

ACCESSION NUMBER: 1964:67940 CAPLUS  
DOCUMENT NUMBER: 60:67940  
ORIGINAL REFERENCE NO.: 60:11924c-h  
TITLE: Polymerization of coniferyl alcohol by acid  
AUTHOR(S): Freudenberg, Karl; Maercker, Gudrun; Nimz, Horst  
CORPORATE SOURCE: Univ. Heidelberg, Germany  
SOURCE: Ber. (1964), 97(3), 903-8  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
GI For diagram(s), see printed CA Issue.

AB Coniferyl alc. (I), as well as PhCH:CHCH<sub>2</sub>OH, is linearly dimerized by acid with the formation of II. The reaction is terminated by an allyl rearrangement with the formation of III (R = H) (IV). The trimeric V (R = H) (VI) showed the same chain termination and an ether bond between the 1st and 2nd member; an ether-like dimer (VII), which is being built up to the trimeric VI, was postulated as an intermediate. p-Hydroxybenzyl alcs. are formed by the chain termination; these participate in the further synthesis by polycondensation with the formation of the final, insol. products. The dimeric coniferyl alc. VIII (R = CH<sub>2</sub>OH) (IX) was synthesized. I (5 g.) in 5 l. H<sub>2</sub>O saturated with CO<sub>2</sub>, adjusted with about 1.5 cc. concentrated HCl to pH 2.5-3, and kept 4 days at 20° yielded a crude polymer; an 8-g. portion chromatographed on Perlon yielded 10% unreacted I, 9% impure IV, and 20% impure VI. IV (800 mg.) in 25 cc. HCO<sub>2</sub>Me<sub>2</sub> stirred 20 hrs. at 20° with 1 g. 2,4-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>F and 0.7 g. NaHCO<sub>3</sub> yielded 0.87 g. bis[2,4-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub> ether (X)]. X in 1:1 Ac<sub>2</sub>O-C<sub>5</sub>H<sub>5</sub>N kept 20 hrs. at room temperature gave the amorphous diacetate of X. Crude polymer (5 g.) in 15 cc. 1:1 Ac<sub>2</sub>O-C<sub>5</sub>H<sub>5</sub>N kept overnight at 20° yielded 6 g. tetraacetate of IV. VI (0.5 g.), 1.05 g. 2,4-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>F, 0.7 g. NaHCO<sub>3</sub>, 8 cc. C<sub>6</sub>H<sub>6</sub>, and 2 cc. Me<sub>2</sub>CO stirred 8 hrs. at room temperature gave the tris[2,4-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>] ether (XI) of VI, which was converted into the triacetate. VI (100 mg.), 12 cc. C<sub>5</sub>H<sub>5</sub>N, and 280 mg. p-PN:NC<sub>6</sub>H<sub>4</sub>COCl kept 48 hrs. at 20° yielded the amorphous tetrakis(p-phenylazobenzoyl) of VI. VI (300 mg.) in 20 cc. MeOH kept 40 hrs. at 20° with 40 mg. p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O, and the product treated with Ac<sub>2</sub>O-C<sub>5</sub>H<sub>5</sub>N yielded the triacetate of V (R = Me). VI (600 mg.) in 80 cc. AcOEt ozonized 7 hrs., and treated with 3 g. Zn dust and 1.5 g. AcOH yielded CH<sub>2</sub>O isolated as the dimedon derivative, m. 191°. Crude polymer from I ozonized, methylated, and oxidized with H<sub>2</sub>O<sub>2</sub> gave only (CO<sub>2</sub>Et)<sub>2</sub>. VIII (R = CO<sub>2</sub>Et)<sub>2</sub> reduced with LiAlH<sub>4</sub> in Et<sub>2</sub>O yielded 140 mg. IX, m. 179-80°.

IT 94686-96-1, 1-Indanethanol, 5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(hydroxymethyl)-6-methoxy-  
(preparation of)

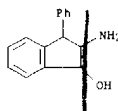
RN 94686-96-1 CAPLUS  
CN 1-Indanethanol, 5-hydroxy-3-(4-hydroxy-3-methoxyphenyl)-2-(hydroxymethyl)-6-methoxy- (7CI) (CA INDEX NAME)



L60 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1959:11752 CAPLUS  
 DOCUMENT NUMBER: 53:11752  
 ORIGINAL REFERENCE NO.: 53:2191c-d  
 TITLE: Derivatives of 2-aminoindan  
 INVENTOR(S): Richter, Helmer; Schenck, Martin  
 PATENT ASSIGNEE(S): Schering Akt.-Ges.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|------|
| DE 937953  |      | 19560119 | DE              |      |

AB Concentrated solns. of 2-isonitroso-3-indanones are smoothly hydrogenated with Raney Ni in neutral or alkaline media to give the 2-amino-3-indanols. Thus, 1.2 g. 1-phenyl-2-isonitroso-3-indanone was dissolved in 5 ml. NaOH-MeOH (from 5 g. NaOH, 5 ml. H<sub>2</sub>O, and 90 ml. MeOH) and 5 ml. MeOH, hydrogenated at room temperature and normal pressure in the presence of Raney Ni, the mixture treated with water, and 1-phenyl-2-amino-3-indanol filtered off, m. 162-4° (dioxane); 1-phenyl-1-methyl-2-amino-3-indanol, which was sterically different from the isomer prepared in Ger. 936,507 (cf. above), was also prepared (HCl salt, m. 120°, after previous sintering, m. 101°). Cf. C.A. 51, 16554d; 52, 14693g.  
 IT 101089-55-8, 1-Indanol, 2-amino-3-phenyl- (preparation of)  
 RN 101089-55-8 CAPLUS  
 CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



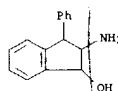
L60 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1959:11750 CAPLUS  
 DOCUMENT NUMBER: 53:11750  
 ORIGINAL REFERENCE NO.: 53:2190f-i, 2191a  
 TITLE: Derivatives of 2-aminoindan  
 INVENTOR(S): Richter, Helmer; Schenck, Martin  
 PATENT ASSIGNEE(S): Schering Akt.-Ges.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|------|
| DE 936507  |      | 19551215 | DE              |      |
| US 2982783 |      | 1961     | US              |      |

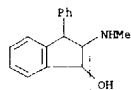
AB 1-Phenyl-3-indanones, which may carry an addnl. alkyl at C-1, are converted to the substituted 2-aminoindans, which carry an oxo or a hydroxy group at C-3, by conventional methods. The products stimulate the central nerve system, but show no sympathicomimetic action; they combine low toxicity with good resorption. Thus, 20.8 g. 1-phenyl-3-indanone was dissolved in 200 ml. Et<sub>2</sub>O and 150 ml. C<sub>6</sub>H<sub>6</sub>, 10.8 g. BuNO<sub>2</sub> added dropwise with stirring while HCl gas was bubbled through the solution precipitating the isonitroso ketone (I), 100 ml. C<sub>6</sub>H<sub>6</sub> added to the mixture which was cooled, and filtered to give 20 g. I, m. 211-12° (decomposition). I (11.8 g.) in 100 ml. MeOH containing 5.5 g. HCl was hydrogenated at normal pressure and 20° with 3 g. Pd-C 2 hrs., filtered, concentrated in vacuo in an N atmosphere, and treated with Et<sub>2</sub>O to precipitate 1-phenyl-2-amino-3-indanone-HCl (II), m. 274-80°. II (8.3 g.) was dissolved in EtOH, hydrogenated with Pd-C and a PdCl<sub>2</sub> solution containing 0.5 g. PdCl<sub>2</sub> at 20° and normal pressure 2 hrs., filtered, evaporated, dissolved in water, cooled, and treated with NH<sub>4</sub>OH to give 1-phenyl-2-amino-3-indanol (III), m. 189-91° (dioxane, which is retained in the crystals); III bitartrate, m. 187-9° (decomposition); neutral sulfate, m. 219-21° (decomposition). III (4.4 g.), 5.1 g. 90% HCO<sub>2</sub>H, and 3.6 g. 37% HCHO was heated 4-5 hrs. on a steam-bath; when less gas was evolved, a clear, light yellow liquid formed; 2 g. concentrated HCl was added and the mixture evaporated in vacuo, dissolved in water, treated with NH<sub>4</sub>OH, and extracted with warm CHCl<sub>3</sub>. After separation the base was triturated with petr. ether, filtered off, and converted to 1-phenyl-2-dimethylamino-3-indanol-HCl, m. 194-6°. Also prepared were: 1-phenyl-2-benzylamino-3-indanol, m. 155-6° (MeOH); 1-phenyl-2-(benzylmethylamino)-3-indanol-HCl, m. 224-5° (decomposition), the benzyl group of which was hydrogenolyzed to give 1-phenyl-2-methylamino-3-indanol-HCl.0.5H<sub>2</sub>O, m. 150-2° (free base, m. 165-7°); 1-phenyl-2-piperidino-3-indanol-HCl, m. 247-8°; 1-phenyl-1-methyl-2-isonitroso-3-indanone, m. 196-8°; 1-phenyl-1-methyl-2-amino-3-indanol-HCl, m. 222-4°; 1-phenyl-5-methyl-2-isonitroso-3-indanone, m. 211-12° (decomposition); and 1-phenyl-5-methyl-2-amino-3-indanol-HCl, m. 232°.

IT 101089-55-8, 1-Indanol, 2-amino-3-phenyl- (and salts)  
 RN 101089-55-8 CAPLUS  
 CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

L60 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

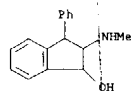


IT 101292-79-9, 1-Indanol, 2-methylamino-3-phenyl-, hydrochloride  
 101292-80-2, 1-Indanol, 2-methylamino-3-phenyl-  
 101583-86-2, 1-Indanol, 2-dimethylamino-3-phenyl-, hydrochloride  
 102560-66-7, 1-Indanol, 2-(benzylmethylamino)-3-phenyl-, hydrochloride 110332-78-0, 1-Indanol, 2-benzylamino-3-phenyl- (preparation of)  
 RN 101292-79-9 CAPLUS  
 CN 1-Indanol, 2-methylamino-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)

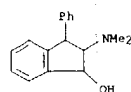


● HCl

RN 101292-80-2 CAPLUS  
 CN 1-Indanol, 2-methylamino-3-phenyl- (6CI) (CA INDEX NAME)



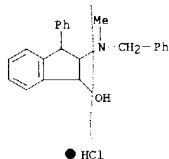
RN 101583-86-2 CAPLUS  
 CN 1-Indanol, 2-dimethylamino-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



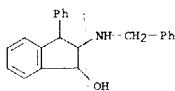
● HCl

L60 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

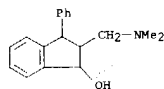
RN 102560-66-7 CAPLUS  
 CN 1-Indanol, 2-(benzylmethylamino)-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



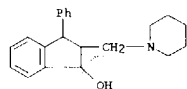
RN 110332-78-0 CAPLUS  
 CN 1-Indanol, 2-benzylamino-3-phenyl- (6CI) (CA INDEX NAME)



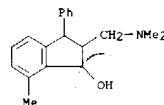
L60 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 CN 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl- (6CI) (CA INDEX NAME)



RN 102596-86-1 CAPLUS  
 CN 1-Indanol, 3-phenyl-2-piperidinomethyl-, hydrochloride (6CI) (CA INDEX NAME)



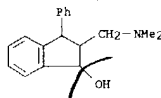
RN 109805-65-4 CAPLUS  
 CN 1-Indanol, 2-(dimethylaminomethyl)-7-methyl-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



L60 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

AB 1958:104380 CAPLUS  
 DOCUMENT NUMBER: 52:104380  
 ORIGINAL REFERENCE NO.: 52:184694-F  
 TITLE: 1-Substituted 2-aminomethyl-3-indanols  
 INVENTOR(S): Richter, Helmer; Schenck, Martin  
 PATENT ASSIGNEE(S): A.-G., Schering  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------|
| DE 946800  |      | 19560809 | DE              |      |
| AB A solution of 3 g. 1-phenyl-2-dimethylaminomethyl-3-indanone hydrochloride in 100 cc. MeOH and 3 cc. concentrated HCl was hydrogenated 3 hrs. with H in the presence of Pd-C under normal conditions, the catalyst filtered off, the filtrate concentrated in vacuo under N, the residue taken up in H <sub>2</sub> O, the solution filtered over C, NaHCO <sub>3</sub> added, the solution extracted with CHCl <sub>3</sub> , the extract dried over K <sub>2</sub> CO <sub>3</sub> , the solvent evaporated, and the crude base recrystd. (MeOH-H <sub>2</sub> O) to give 1-phenyl-2-dimethylamino-methyl-3-indanol, m. 110-12°; hydrochloride, m. 235-5.5°. Similarly were prepared the following substituted 2-methyl-3-indanol hydrochlorides (substituent and m.p. given): 1-methyl-2-piperidino, 221.5°; 1-phenyl-2-piperidino, 202.5-5.0°; 1-phenyl-2-dimethylamino-5-methyl, 238-41°; and 1,1-dimethyl-2-dimethylamino, 266-8° (decomposition). The comps. thus prepared exhibit analeptic properties. |      |          |                 |      |
| IT 101717-79-7, 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride 101717-80-0, 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl- 102596-86-1, 1-Indanol, 3-phenyl-2-piperidinomethyl-, hydrochloride 109805-65-4, 1-Indanol, 2-(dimethylaminomethyl)-7-methyl-3-phenyl-, hydrochloride (preparation of)   |      |          |                 |      |
| RN 101717-79-7 CAPLUS<br>CN 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)  |      |          |                 |      |

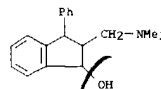


RN 101717-80-0 CAPLUS

L60 ANSWER 49 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

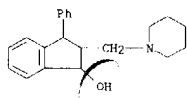
AB 1958:6781 CAPLUS  
 DOCUMENT NUMBER: 52:6781  
 ORIGINAL REFERENCE NO.: 52:12581, 1259a  
 TITLE: Substituted 2-aminomethylindanols  
 PATENT ASSIGNEE(S): Schering A.-G.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------|
| GB 777070  |      | 19570619 | GB              |      |
| AB Condensing a 1-acylindanone with HCHO and Me <sub>2</sub> NH <sub>2</sub> ·HCl and reducing with Pd gives 1-aryl-2-dimethylaminomethyl-3-indanone-HCl. Thus, running a Mannich reaction with 1-phenyl-3-indanone, HCHO, and Me <sub>2</sub> NH <sub>2</sub> ·HCl, hydrogenating with Pd-C in 100 ml. MeOH containing 3 ml. HCl, stopping after 1 mole H is absorbed, filtering, evaporating the filtrate in vacuo in an N atmospheric, dissolving the residue in H <sub>2</sub> O, filtering over C, liberating the base with NaHCO <sub>3</sub> solution, extracting with CHCl <sub>3</sub> , drying over anhydrous K <sub>2</sub> CO <sub>3</sub> , and evaporating the CHCl <sub>3</sub> gave 1-phenyl-2-dimethylaminomethyl-3-indanol, m. 110-12° (MeOH-H <sub>2</sub> O); HCl salt, m. 235-5.5°. Similarly, the following substituted 3-indanol-HCl were prepared (substituents and m.p. given): 1-Me, 2-(piperidinomethyl), 219-21.5°; 1-Ph, 2-(piperidinomethyl), 202.5-5°; 1-Ph, 2-Me <sub>2</sub> NCH <sub>2</sub> , 238-41°; 1,1-Me <sub>2</sub> , 2-Me <sub>2</sub> NCH <sub>2</sub> , 266-8° (decomposition). |      |          |                 |      |
| IT 101717-79-7, 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride 102596-86-1, 1-Indanol, 3-phenyl-2-piperidinomethyl-, hydrochloride 109805-65-4, 1-Indanol, 2-(dimethylaminomethyl)-6-methyl-3-phenyl-, hydrochloride (preparation of)   |      |          |                 |      |
| RN 101717-79-7 CAPLUS<br>CN 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)  |      |          |                 |      |

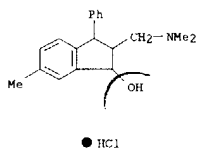


RN 102596-86-1 CAPLUS  
 CN 1-Indanol, 3-phenyl-2-piperidinomethyl-, hydrochloride (6CI) (CA INDEX NAME)

L60 ANSWER 49 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

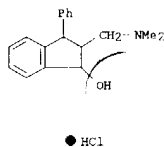


RN 109908-75-5 CAPLUS  
CN 1-Indanol, 2-(dimethylaminomethyl)-6-methyl-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)

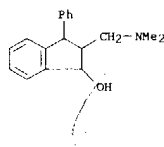


L60 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 101717-79-7 CAPLUS  
CN 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



RN 101717-80-0 CAPLUS  
CN 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl- (6CI) (CA INDEX NAME)



L60 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1957:91048 CAPLUS  
DOCUMENT NUMBER: 51:91048  
ORIGINAL REFERENCE NO.: 51:16554c-h  
TITLE: 2-(Aminomethyl)indan compounds  
INVENTOR(S): Richter, Helmer; Schenck, Martin  
PATENT ASSIGNEE(S): Schering A.-G.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|------|
| US 2794048 |      | 19570528 | US              |      |

AB The preparation of 1-phenyl-2-dimethylaminomethyl-2-indene, 1-phenyl-2-dimethylaminomethyl-3-indanol, and 1-phenyl-2-(dimethylaminomethyl)indan is reported. These compds. show an analeptic action without any side reactions on the sympathetic nervous system. 1-Phenyl-2-(dimethyl-aminomethyl)-3-indanone-HCl (I) (3 g.) produced from 1-phenyl-3-indanone by a Mannich reaction with CH<sub>2</sub>O and Me<sub>2</sub>NH<sub>2</sub>·HCl is hydrogenated in 100 ml. MeOH with the addition of 3 ml. concentrated HCl using Pd-C as catalyst. H (1 mole) is absorbed in 3 hrs. After removal of the catalyst, the filtrate is concentrated in vacuum under N atmospheric. The residue is taken up in H<sub>2</sub>O and filtered over carbon. The filtrate is basified with NaHCO<sub>3</sub> solution and extracted with CHCl<sub>3</sub>. Removal of CHCl<sub>3</sub> after drying over KOH gave the crude base. Recrystn. from MeOH-H<sub>2</sub>O afforded the pure base 1-phenyl-2-dimethylaminomethyl-3-indanol (II), m. 110-12°; HCl salt, m. 235-5°. II·HCl (1.2 g.) mixed with 12 ml. glacial AcOH and 4 ml. concentrated HCl is refluxed 30 min., the mixture evaporated in vacuo under N, and the residue in H<sub>2</sub>O filtered over C. The base is liberated with NaHCO<sub>3</sub> solution and extracted with ether. The ether extract dried over KOH and treated with ethereal HCl gave 1-phenyl-2-dimethylaminomethyl-2-indene-HCl (III), precipitated from MeOH-ether, m. 160-2°. I (12 g.) in 180 ml. glacial AcOH and 10 g. of 85% H<sub>2</sub>SO<sub>4</sub> is hydrogenated under normal pressure at 60° with Pd-C as catalyst. The hydrogenation is stopped after 2 moles H are taken up. Working up the product as before gave 1-phenyl-2-dimethylaminomethylindan-HCl (IV), m. 175°. II·HCl (6.1 g.) in 30 ml. glacial AcOH and 5 ml. H<sub>2</sub>SO<sub>4</sub> is hydrogenated under normal pressure at 60° with Pd black as catalyst. H (1 mole) is adsorbed in 2 hrs. after which the catalyst is filtered off and the H<sub>2</sub>SO<sub>4</sub> neutralized with KOH under cooling. Isolating the product as before gave IV. III (5 g.) in MeOH is hydrogenated at room temperature and atmospheric pressure with Pd black as catalyst. After the H absorption is ended, filtration of the catalyst and isolation of the product as usual gave IV, m. 173-4°. III can also be reduced to IV under identical conditions with Raney Ni as catalyst.

IT 101717-79-7, 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride 101717-80-0, 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-

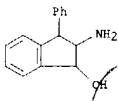
L60 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1957:47212 CAPLUS  
DOCUMENT NUMBER: 51:47212  
ORIGINAL REFERENCE NO.: 51:8791h-1,8792a-e  
TITLE: 2-Aminoindans  
PATENT ASSIGNEE(S): Schering A.-G.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|------|
| GB 752949  |      | 19560718 | GB              |      |

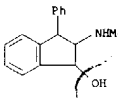
AB 1-Phenyl-3-indanone (20.8 g.) in Et<sub>2</sub>O and C<sub>6</sub>H<sub>6</sub> treated with HCl gas and 10.8 g. BuNO<sub>2</sub> added yielded 20 g. crude 1-phenyl-2-isonitroso-3-indanone (I), m. 211-12° (decomposition) (from MeOH). I reduced with Pd-C activated by PdCl<sub>2</sub> gave 1-phenyl-2-amino-3-indanol (II) without isolation of the amino ketone (III). I (11.8 g.) in MeOH containing 5.5 g. HCl and 3 g. Pd-C hydrogenated 2 hrs. at room temperature gave III·HCl, m. 274-80° (precipitated by addition of Et<sub>2</sub>O). III·HCl (8.3 g.) in alc. hydrogenated with Pd-C containing 0.5 g. PdCl<sub>2</sub> and the base precipitated from solution with NH<sub>3</sub> yielded II, m. 189-91° (from dioxane); bitartrate, m. 187-9°; neutral sulfate, m. 219-21° (decomposition); HCl salt, strongly hygroscopic. II (4.4 g.) heated 4-5 hrs. with 5.1 g. 90% HCO<sub>2</sub>H and 3.6 g. 37% HCHO, 2 g. concentrated HCl added, the mixture concentrated to dryness, the residue dissolved in H<sub>2</sub>O and treated with NH<sub>3</sub>, the base isolated, ground with ligroine, filtered off, and converted into 1-phenyl-2-dimethylamino-3-indanol-HCl, m. 194-6°. I (1.2 g.) hydrogenated 1 hr. in 5 cc. MeOH-NaOH and 5 cc. MeOH with Raney Ni until 0.93 molar equivalent of H was absorbed yielded 80% II, m. 162-4°. A similar reduction of 1.2 g. I with the same reagents required 5 min. at 20 atmospheric for an uptake of 0.93 molar equivalent H and gave 88% II. 1-Methyl-2-isonitroso-3-indanone (IV) (1.74 g.) similarly reduced 3.5 hrs. with Raney Ni and the product treated with HCl gave 2.05 g. 1-methyl-2-amino-3-indanol HCl (V), m. 234-6°. IV (8.8 g.) reduced with Raney Ni under alkaline conditions and the product acidified gave V. II (11.3 g.) refluxed 2 hrs. with 75 cc. alc., 5.3 g. BzH, and 2 drops piperidine yielded 9.7 g. Schiff's base, m. 142-3°. This base (8.9 g.) in dioxane reduced 2 hrs. with Raney Ni catalyst gave 8.7 g. 1-phenyl-2-benzylamino-3-indanol (VI), m. 155-6°. VI (5.1 g.) refluxed 4 hrs. with 4.2 g. 85% HCO<sub>2</sub>H and 1.5 g. 38% HCHO gave 5.4 g. 1-phenyl-2-benzylmethylamino-3-indanol-HCl (VII), m. 224-5° (decomposition). VII (4.8 g.) in 70 cc. MeOH hydrogenated 35 min. at 50° with Pd black gave 4 g. 1-phenyl-2-methylamino-3-indanol-HCl, m. 150-2°; the free base, m. 165-7°. II (2.25 g.) refluxed 3 hrs. with 2.3 g. Br·(CH<sub>2</sub>)<sub>5</sub>Br, then refluxed 15 hrs. with 1.7 g. NaHCO<sub>3</sub> and 10 cc. PhMe, and the product treated with Et<sub>2</sub>O-HCl gave 1-phenyl-2-piperidino-3-indanol-HCl, m. 247-8°. 1-Phenyl-1-methyl-3-indanone (15 g.) treated with HCl and BuNO<sub>2</sub> 0.5 hr. and left a further 0.5 hr. gave the isonitroso ketone (VIII), crystals, m. 196-8°. VIII (12 g.) similarly reduced in MeOH-HCl with Pd-C and PdCl<sub>2</sub> gave 1-phenyl-1-methyl-2-amino-3-indanol-HCl, m. 222-4°. 1-Methyl-2-amino-3-indanol (4 g.) heated 4 hrs. with HCO<sub>2</sub>H and HCHO as above gave 1-methyl-2-dimethylamino-3-indanol-HCl, m. 172-3°.

IT 101089-55-0, 1-Indanol, 2-amino-3-phenyl

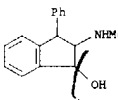
L60 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
(and salts)  
RN 101089-55-8 CAPLUS  
CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



IT 101292-79-9, 1-Indanol, 2-methylamino-3-phenyl-, hydrochloride  
101292-80-2, 1-Indanol, 2-methylamino-3-phenyl-  
101583-86-2, 1-Indanol, 2-dimethylamino-3-phenyl-, hydrochloride  
102548-94-7, 1-Indanol, 2-benzylideneamino-3-phenyl-  
102560-66-7, 1-Indanol, 2-(benzylmethylamino)-3-phenyl-,  
hydrochloride 110332-78-0, 1-Indanol, 2-benzylamino-3-phenyl-  
(preparation of)  
RN 101292-79-9 CAPLUS  
CN 1-Indanol, 2-methylamino-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



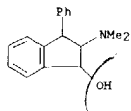
RN 101292-80-2 CAPLUS  
CN 1-Indanol, 2-methylamino-3-phenyl- (6CI) (CA INDEX NAME)



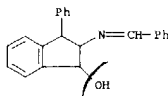
RN 101583-86-2 CAPLUS  
CN 1-Indanol, 2-dimethylamino-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)

L60 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

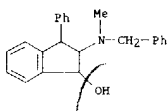
L60 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



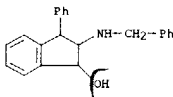
● HCl  
RN 102548-94-7 CAPLUS  
CN 1-Indanol, 2-benzylideneamino-3-phenyl- (6CI) (CA INDEX NAME)



RN 102560-66-7 CAPLUS  
CN 1-Indanol, 2-(benzylmethylamino)-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



● HCl  
RN 110332-78-0 CAPLUS  
CN 1-Indanol, 2-benzylamino-3-phenyl- (6CI) (CA INDEX NAME)



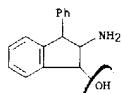
L60 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1955:69016 CAPLUS  
DOCUMENT NUMBER: 49:69016  
ORIGINAL REFERENCE NO.: 49:13195g-1,13196a-e  
TITLE: Some amines derived from 3-phenyl-1-indanone  
AUTHOR(S): Zaugg, Harold E.; Horrom, Bruce W.  
CORPORATE SOURCE: Abbott Labs., North Chicago  
SOURCE: Journal of the American Chemical Society (1954), 76,  
4488-9  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB A series of amines derived from the Mannich reaction of  
3-phenyl-1-indanone (I) has been prepared I (31.2 g.), 50 g. Me2NH.HCl, and  
0.36 cc. concentrated HCl in 60 cc. refluxing absolute EtOH treated during  
105 min. with 13 g. paraformaldehyde in portions, the mixture refluxed 40 min. with  
stirring, cooled, poured in ice containing 3 cc. concentrated HCl, and  
washed with  
Et2O, the aqueous solution made alkaline with 2N NaOH while adding ice, the  
precipitated oil  
dissolved in Et2O, the solution washed with H2O, dried with MgSO4, and  
filtered, the filtrate treated with excess HCl in Et2O, and the precipitate  
(22.7  
g.), m. 125-35°, recrystd. twice from MeOH-Et2O gave 15.3 g.  
2-dimethylaminomethyl-3-phenyl-1-indanone HCl salt (Ia), white crystalline  
powder, m. 138-40°; at the m.p. temperature it appeared to split off  
Me2NH.HCl to form a cloudy melt which does not become entirely clear up to  
167-9°. In the same manner were prepared: the 2-Et2NCH2 analog of  
Ia, m. 120-1°, 13%; 2-piperidinomethyl analog, m. 155-6°,  
12%; 2-morpholinomethyl analog m. 150-1°, 30%. II (15 g.) in 75  
cc. MeOH and 225 cc. H2O treated during 40 min. with cooling with 300 g.  
5% Na-Hg in portions while adding 75 cc. 50% aqueous AcOH was added dropwise  
to keep the pH between 4 and 6, the mixture was then treated with 40 cc. 50%  
AcOH, and cooled in ice with stirring for 1.25 hrs., the cloudy mixture  
decanted from the Hg and extracted with Et2O, the aqueous layer made  
alkaline with 20%  
aqueous NaOH, the precipitate dissolved in Et2O, washed neutral with H2O,  
dried with  
MgSO4, filtered, and treated with excess dry HCl in Et2O, and the crude  
precipitate (11.2 g.), m. 195-205°, recrystd. twice from absolute iso-PrOH  
gave 4.2 g. 2-dimethylaminomethyl-3-phenyl-1-indanol HCl salt (III), m.  
238-5-40°. III (1 g.) in 2 cc. concentrated HCl and 8 cc. glacial AcOH  
refluxed 15 min., the mixture evaporated to dryness in vacuo the residue  
dissolved in H2O, the solution washed with Et2O, made alkaline with excess  
concentrated  
NH4OH, and extracted with Et2O, the extract washed neutral with H2O, dried  
with  
MgSO4, and treated with a slight excess of (CO2H)2 in Et2O, and the  
precipitate  
(1 g.), m. 163-70°, recrystd. twice from dry EtOH-Et2O gave  
2-dimethylaminomethyl-3-phenylindene (IV) H oxalate, m. 183-5°; HCl  
salt of IV, m. 169-70°. 2-Dimethylamino-1-indanone treated with  
PhMgBr by the method of Hoffmann and Schellenberg (C.A. 40, 1486.5) gave  
IV, b.p. 136-7°, m. 65-7° which was converted to the  
bioxalate, m. 184-6°. 2-Isonitroso-3-phenyl-1-indanone (5.9 g.) in  
250 cc. absolute EtOH containing 3 g. HCl hydrogenated 4 hrs. at room  
temperature and 35  
lb. pressure over 0.6 g. 20% Pd-C, the mixture filtered, and the filtrate  
concentrated to about 20-5 cc. and diluted with 5 vols. dry Et2O  
precipitated 5.5 g.

L60 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 2-amino-3-phenyl-1-indanone (V) HCl salt. V.HCl converted to the free V, treated with dry HCl, and the resulting V.HCl triturated with dry Me<sub>2</sub>CO to remove a purple impurity recrystd. twice from iso-PrOH-Et<sub>2</sub>O gave pure V.HCl, white microcryst. powder, m. with decompn. over a range above 250°. 3-Phenyl-1-indanone (35 g.) in 450 cc. dry Et<sub>2</sub>O treated dropwise with stirring with 26.7 g. Br in 225 cc. CHCl<sub>3</sub> at 18-20°, the mixt. washed neutral with H<sub>2</sub>O, dried with MgSO<sub>4</sub>, and evapd., and the crude residue (49.5 g.) recrystd. twice from hexane yielded 39.5 g. pure 2-bromo-3-phenyl-1-indanone (VI), m. 87-8°. VI (12 g.) and 8.5 g. (iso-PrOH) 3Al in 60 cc. abs. iso-PrOH refluxed 2.5 hrs. while distg. out the Me<sub>2</sub>CO formed at a rate of 4-6 drops/min., the mixt. treated with 18 cc. concd. HCl and 88 cc. H<sub>2</sub>O in the cold, the org. layer dissolved in Et<sub>2</sub>O, the soln. washed with H<sub>2</sub>O, dried with MgSO<sub>4</sub>, and evapd., the residual dark oil dissolved in EtOAc, the soln. dild. with pentane and cooled, and the small amt. crude deposit crystd. from heptane gave 1.6 g. 2-bromo-3-phenyl-1-indanol, m. 129.5-30°, and a liquid residue of by-products.

IT 101089-55-8, 1-Indanol, 2-amino-3-phenyl- 101717-79-7,  
 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride  
 (preparation of)

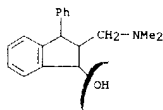
RN 101089-55-8 CAPLUS

CN 1H-Inden-1-ol, 2-amino-2,3-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

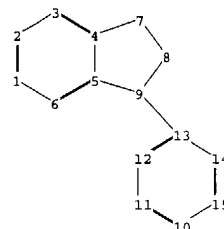
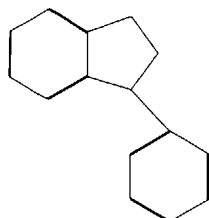


RN 101717-79-7 CAPLUS

CN 1-Indanol, 2-(dimethylaminomethyl)-3-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



● HCl



L2

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

chain bonds :

9-13

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

4-7 5-9 7-8 8-9

exact bonds :

9-13

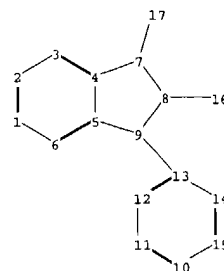
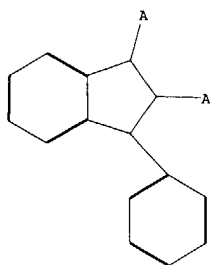
normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:Atom 15:Atom





L37

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ring/chain nodes :

16 17

chain bonds :

7-17 8-16 9-13

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

4-7 5-9 7-8 7-17 8-9 8-16

exact bonds :

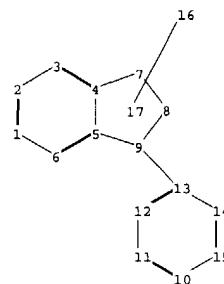
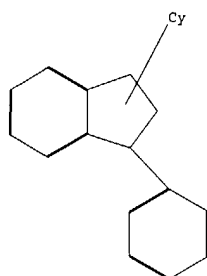
9-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS



not L45

chain nodes :

16

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

chain bonds :

9-13

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

4-7 5-9 7-8 8-9

exact bonds :

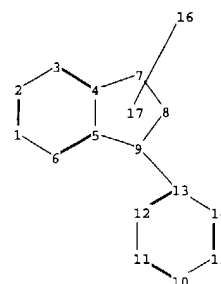
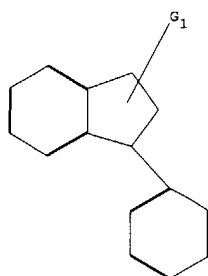
9-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS



not L 56

chain nodes :

16

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

chain bonds :

9-13

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

4-7 5-9 7-8 8-9

exact bonds :

9-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

G1:CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS